

A REVISION OF THE AUSTRALIAN NOLIDAE (LEPIDOPTERA).

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The *Nolidae* are a group that has been through many vicissitudes. Linnaeus (1758) described the first species as *Tinea cucullatella*. Hübner (1827) described the genus *Roeselia*, placing it in the *Tortricidae*. Stainton (1859) placed the family in the *Pyraloidea*. Even as late as 1902, Dyar in his Catalogue of the American Lepidoptera, placed the *Nolidae* in his *Tineoidea*, which included the *Pyralidae* and *Tortricidae*. There seems to have been no reason for these conjectures, except the small size or superficial resemblances of the species.

We owe our first real knowledge of the Australian species to Meyrick, who described 18 species (a few of which had been previously named) in Proc. Linn. Soc. N.S. Wales in 1886 and 1888. He placed them at that time in the *Arctiadae*, as also he did in his Handbook of British Lepidoptera (1895), but in his Revised Handbook (1927) he recognised them as a separate family. Hampson, in the second volume of his Catalogue of the Lepidoptera Phalaenae (1900), gave us for the first time a complete revision of the whole family in the world fauna, treating it as a subfamily of the *Arctiadae*. This was added to in the first volume of the Supplement to that work (1914). These are still, and will long remain, the chief authority for the group.

The family may be thus defined: Tongue present. Palpi well developed, laterally compressed, sometimes very long, porrect or obliquely ascending. Antennae with a small tuft of scales on lower edge of basal joint. Thorax usually smooth, but sometimes with a posterior crest. Abdomen often with a dorsal crest on first segment, and sometimes on second segment. Legs smooth; spurs well developed. Forewings with tufts of scales; without areole. Hindwings with 12 coincident with cell to middle.

A long anastomosis of 12 of the hindwings with the cell occurs in some groups of the *Noctuidae*, but in these this vein is separate at its base; complete fusion is a character common to the *Nolidae* and *Arctiadae*. As I have stated elsewhere, I consider this is an instance of parallel evolution. The tongue may be well developed or rather weak; sometimes, when retracted, it is completely hidden by the well developed and appressed palpi; it is doubtful whether it is ever absent. The antennal tuft is a small but constant character. The tufts on the forewings are subcostal and three in number, the third being either before, at, or after middle. Occasionally a fourth tuft, more dorsal and peripheral, is present. To this arrangement the genus *Zia* is an exception; in it the tufts are arranged differently.

I agree with Hampson that the *Nolidae* are a direct development of the *Noctuidae*, the *Sarrhorthripinae* being their immediate allies; but I hold that the *Arctiadae* are a direct development of the *Hypsidae*.

KEY TO GENERA.

1. Forewings with 9 and 10 absent	2	
Forewings with 9 present, 10 absent	4	
Forewings with 9 and 10 present	6	
2. Forewings with 3 and 4 stalked .. .. .	..	<i>Pisara</i> 1
Forewings with 3 and 4 separate	3	
3. Abdomen with basal dorsal crests .. .. .	..	<i>Celama</i> 2
Abdomen without crests .. .. .	..	<i>Sorocostia</i> 3
4. Forewings with cell short and its lower angle strongly produced .. .. .	..	<i>Idiocyttara</i> 4
Forewings with cell not so formed	5	
5. Abdomen with basal dorsal crest, male antennae ciliated .. .. .	..	<i>Nola</i> 5
Abdomen without dorsal crests, male antennae with long pectinations .. .. .	..	<i>Selca</i> 6
6. Forewings with 10 stalked with 7, 8, 9 .. .. .	..	<i>Roeselia</i> 7
Forewings with 10 separate	7	
7. Abdomen without dorsal crests	8	
Abdomen with dorsal crests .. .. .	..	<i>Zia</i> 10
8. Hindwings with 6 and 7 stalked .. .. .	..	<i>Aedemon</i> 8
Hindwings with 6 and 7 connate .. .. .	..	<i>Spathoptila</i> 9

The discrimination between the two largest genera, *Celama* and *Nola* requires care, for it is sometimes not easy. Apart from this the application of this key should not be difficult.

The diagnosis of the species of these two genera will always be a difficult problem, and cannot be made easier by keys. Close attention must be paid to the following structural characters:—

1. The length of the palpi in terms of the breadth of the eyes.
2. The structure of the male antennae.
3. The number and position of the tufts on the forewings. These are easily abraded, and this must be allowed for.
4. The markings on the forewings, especially the antemedian and postmedian lines, must be carefully studied, and compared with the best available descriptions. They are subject to variation, not so much in their pattern, as in the obsolescence of parts of the pattern, even in fresh specimens. Worn examples may be misleading, and cannot always be determined. For the determination of a species a series or at least one example in perfect condition is desirable.

1. Gen. PISARA Wlk.

J. Linn. Soc. Zool. 1862, p.117; Hmps. ii, p.5.

Palpi long, laterally compressed; second joint rough-scaled above and beneath; terminal joint short, pointed. Antennae of male with fascicles of cilia. Abdomen with dorsal tufts on first and second segments. Forewings with 2 from near angle, 3 and 4 stalked from angle, 5 closely approximated, 6 from well below upper angle, 7 and 8 stalked, 9 and 10 absent, 11 separate. Hindwings with 2 from three-fourths, 3 and 4 coincident from angle, 5 from middle of cell, 6 and 7 stalked, 12 anastomosing to middle of cell. Type: *P. opalina* Wlk. from Borneo and India.

Only two species have been described.

1. *PISARA HYALOSPILA*.

Pisara hyalospila Hmps. Suppl. i, p.369; Turn., Proc. Roy. Soc. Q. 1915, p.11.

♂ ♀, 20–22 mm. Palpi 2 and a half. Antennae of male with fascicles of cilia (3). Forewings of male with a suboblong fovea in posterior end of cell; whitish; tufts large, brassy-fuscous, second and third approximated, third tuft median; a large brassy-fuscous basal patch, its posterior edge from two-fifths costa to near middle of dorsum, nearly straight; postmedian line slender, fuscous, sometimes reduced to dots, from costa before middle, subcostal to two-thirds, there acutely toothed, thence strongly sinuate to three-fifths dorsum; subterminal fuscous, from four-fifths costa to tornus, with shallow subcostal and submedian prominences, often preceded by a band of brassy-fuscous suffusion.

NORTH QUEENSLAND: Cape York; Cairns; Atherton. QUEENSLAND: Nambour; Brisbane; McPherson Range. NEW SOUTH WALES: Lismore.

2. Gen. *CELAMA*.

Wlk., xxxii, p.500; Hmps. ii, p.5.

Palpi porrect, laterally compressed, moderate or long, sometimes very long, rough-scaled above and beneath; terminal joint minute. Antennae of male with fine short pectinations or with fascicles of cilia. Abdomen with dorsal crests on first and second segments. Forewings with 2 from two-thirds, 3 from angle, 4 and 5 approximated at origin, 6 from below upper angle, 7 and 8 stalked, 9 and 10 absent, 11 separate. Hindwings with 2 from shortly before angle, 3 and 4 coincident from angle, 5 widely separate, 6 and 7 stalked, 12 anastomosing with cell to middle. Type: *C. bifascialis* Wlk. Closely allied to *Nola*, differing only in the absence of vein 9 of the forewing. Occasionally in that genus 9 separates close to the wing margin, and is difficult to observe, but descaling is seldom necessary. The genus cannot be divided according to the antennal differences, for in many species the fascicles consist of branching cilia, and seem to be intermediate, the pectinations being reduced to such fineness as to be imperceptible.

2. *CELAMA DIASTROPHA* n.sp.

διαστροφος, distorted.

♂ ♀, 13–14 mm. Head and thorax white. Palpi 3; pale brown, sometimes with a fuscous ventral streak from base to three-fourths. Antennae pale grey, towards base white; in male with fascicles of branching cilia (3). Abdomen grey-whitish. Legs whitish; anterior pair fuscous with whitish tarsal rings. Forewings suboval, costa strongly arched near base, thence only slightly, apex rounded, termen slightly rounded, oblique; undersurface in male with raised ridges of altered scales on subcostal and median veins in basal area, together with elongate foveal depressions between them and in cell; cell shortened to one-third and with strongly curved costal edge; 7 and 8 short-stalked or approximated from angle; in female cell normal and 7 and 8 short-stalked; white with fuscous and brown markings; tufts large, pale brown, third tuft absent, a fourth tuft on lower angle of cell; a short dark fuscous streak from base of costa along fold; antemedian line imperfect or represented by a few dots; a fuscous suffusion between fourth tuft and mid-dorsum; postmedian line represented by a series of dark fuscous dots, from one-third

costa to middle of disc at two-thirds, there angled inwards to end at mid-dorsum; subterminal interrupted, suffused, or reduced to dots; a series of brownish dots on termen and costa beyond middle; cilia whitish with pale fuscous bars. Hindwings and cilia whitish.

NORTH QUEENSLAND: Cape York in October and November (W. B. Barnard); Kuranda in October (F. P. Dodd); five specimens.

3. COELAMA COELOPHORA n.sp.

κοιλοφορος, bearing a hollow.

♂, 15 mm. Head white. Palpi 2; pale grey. Antennae grey, towards base white. Thorax grey; patagia white. Abdomen grey-whitish. Legs whitish; anterior pair fuscous. Forewings rather narrow, suboval, costa gently arched, apex rounded, termen obliquely rounded; in male cell short (one-third) and occupied by a deep suboblong hollow or fovea; 3, 4, 5 stalked and connate with 2 from angle of cell, 7 and 8 long-stalked, 11 curved from before upper angle; grey with fuscous markings; tufts approximated, grey, third tuft at one-third; a slender oblique inwardly curved line from second tuft towards dorsum; postmedian line slender, from midcosta, subcostal to three-fourths, thence oblique and dentate to fourth-fifths, curved inwards on vein 5 and sinuate to three-fourths dorsum; subterminal suffused; a terminal series of dots; cilia grey. Hindwings and cilia whitish. The type is in poor condition, and this description may need supplementing, but the male is easily recognised by its structural characters.

QUEENSLAND: Brisbane in August; one specimen.

4. CELAMA CRUCIGERA n.sp.

crucigerus, marked with a cross.

♂, 18 mm. Head white. Palpi 2 and a half, grey, upper edge white. Antennae grey, towards base white; in male with fascicles of cilia (2 and a half). Thorax grey. Abdomen grey-whitish; basal crest grey. Legs fuscous with whitish rings; posterior pair except tarsi mostly whitish. Forewings elongate-triangular, costa gently arched, apex pointed, termen slightly rounded, strongly oblique; in male with a suboblong posterior fovea in cell; cell short (one-third); 3, 4, 5 stalked from angle of cell connate with 2, 11 curved from near upper angle; white lightly sprinkled with grey and fuscous; tufts grey, approximated, third tuft at one-third; a subdorsal dot at one-fifth, connected by a fine line with another beneath and before middle; an oblique line from about middle of lower edge of cell, crossing previous line, to above dorsum at four-fifths, there sharply angled to three-fourths dorsum; a spot in cell; another on costa at two-fifths; postmedian represented by short streaks on veins, that on vein 6 displaced inwards; subterminal represented by some vague suffusion; cilia grey with some white bars. Hindwings and cilia whitish. Agrees with male of *C. coelophora* in neuration, but with very different pattern on forewings.

QUEENSLAND: McPherson Range (Springbrook) in September; one specimen (W. B. Barnard). Type in Queensland Museum.

5. CELAMA COELOBATHRA n.sp.

κοιλοβαθρος, with hollowed base.

♂, 19 mm. Head white. Palpi 4, grey, upper edge and basal two-thirds of lower edge white. Antennae grey, towards base white; in male

with fine pectinations bearing tufts of cilia (2). Thorax whitish; tegulae sprinkled with fuscous. Abdomen grey; tuft whitish; underside pale ochreous. Legs whitish; anterior pair grey with whitish rings. Forewings elongate-triangular, costa gently arched, apex pointed, termen nearly straight, oblique; in male with a small basal fovea in cell; neuration normal; whitish sparsely sprinkled with grey; markings fuscous; tufts small, fuscous, third tuft before middle; costal dots at base, one-fourth, and middle; antemedian line obsolete; postmedian slender, from beneath midcosta, subcostal for a short distance, then angled to become transverse, and thickened by fuscous suffusion anteriorly, about middle bent inwards and suffused to dorsum at two-thirds, with a subdorsal projection; subterminal pale; suffused with a small projection above middle, and a larger rounded beneath middle; some terminal dots; cilia grey. Hindwings and cilia whitish.

WEST AUSTRALIA: Perth, one specimen received from Mr. W. H. Mathews.

6. CELAMA THYRIDOTA.

Celama thyridota Hmps., Cat. Lep. Phal. Suppl. i, p.390; Turn., Proc. Roy. Soc. Q. 1915, p.12.

Antennae with fine pectinations ending in fascicles of cilia (3 and a half). The male type, which is still unique, is easily recognised by its foveae. With it I could associate several females, but unfortunately I am unable to give any criteria, by which these can be distinguished from *C. bifascialis*, of which I have seen a series of both sexes.

NORTH QUEENSLAND: Townsville.

7. CELAMA FOVIFERA.

Celama fovifera Hmps., Ann. Mag. Nat. Hist. (7), xi, p.342; Cat. Lep. Phal. Suppl. i, p.401.

Unknown to me.

NORTH QUEENSLAND: Townsville.

8. CELAMA BIFASCIALIS.

Pisara bifascialis Wlk. xxxi, p.244.

Celama liparisalis Wlk. xxxii, p.500.

Celama bifascialis Hmps. ii, p.11, pl.18, f.4.

Palpi 2 and a half. Antennae with fine pectinations ending in fascicles of cilia (3 and a half).

NORTH QUEENSLAND: Thursday I.; Cape York; Cardwell; Dunk I., Townsville. QUEENSLAND: Nambour; Brisbane; Toowoomba; NEW SOUTH WALES: Lismore.

9. CELAMA SEMOGRAPTA.

Sorocostia semograptæ Meyr., Proc. Linn. Soc. N.S.W. 1886, p.720.

Nola semograptæ Hmps. ii, p.42, pl.19, f.10.

Nestiodes eremnopa Turn., Proc. Roy. Soc. Tas. 1938, p.71.

Tongue present but weakly developed. Palpi 1 and a fourth. Antennae in male with fascicles of cilia (2 and a half).

NEW SOUTH WALES: Ebor; Sydney; Mittagong. VICTORIA: Gisborne. TASMANIA: Deloraine; Bothwell; Hobart; Mt. Wellington. SOUTH AUSTRALIA: Mt. Lofty.

10. CELAMA TAENIATA.

Nola taeniata Snel., Tijd. v, Ent. 1874, p.65, pl.6, f.1.

Roeselia fragilis Swin., Tr. Ent. Soc. 1890, p.184; Hmps., Moths Ind. ii, p.139.

Sorocostia mesozona Luc. Proc Linn. Soc. N.S.W. 1889, p.1075.

♂ ♀, 12–16 mm. Head and thorax white. Palpi 2; grey, upper surface white. Antennae grey, near base white; in male with very fine pectinations carrying tufts of cilia (1 and a half). Abdomen grey-whitish. Legs whitish; anterior pair grey with whitish rings. Forewings elongate-triangular, costa gently arched, termen slightly rounded, slightly oblique; white; tufts fuscous, first tuft small, third tuft beyond middle, included in fascia; a series of minute costal striae more or less developed; second tuft connected with dorsum, and giving off a short, very slender, sinuate line towards dorsum; a rather broad postmedian fascia, brown more or less mixed with dark fuscous and sprinkled with lustrous white scales, its posterior edge oblique from two-thirds costa but soon angled inwardly, oblique and slightly waved to two-thirds dorsum; a slender wavy fuscous or brownish subterminal line more or less developed; sometimes a submarginal series of dots; cilia grey. Hindwings and cilia white. Very distinct.

NORTH AUSTRALIA: Darwin. NORTH QUEENSLAND: Innisfail. QUEENSLAND: Maryborough; Brisbane; Tweed Heads. NEW SOUTH WALES: Lismore. Also from Java, Ceylon and India.

11. CELAMA MICROPHILA n.sp.

Sorocostia microphila Turn., Trans. Roy. Soc. S.A. 1899, p.16.

Celama microphila Hmps., Suppl. i, p.402, pl.23, f.9.

♂ ♀, 11–13 mm. Head, thorax, and abdomen grey. Palpi 1 and a half; fuscous. Antennae grey; in male with fascicles of cilia (2). Legs fuscous with whitish rings. Forewings narrowly triangular, costa slightly arched, apex round-pointed, termen nearly straight, strongly oblique; whitish with fuscous markings and scattered scales; tufts grey-whitish, sometimes partly fuscous, third tuft median; second tuft connected with one-fourth costa, and emitting a fine line to one-fifth dorsum; sometimes costal dots at one-fourth and middle; postmedian line from near midcosta, outwardly oblique to middle of disc, thence inwardly curved to four-fifths dorsum, well defined posteriorly, but suffused anteriorly in dorsal half; subterminal line ill defined and irregularly dentate; sometimes a terminal series of dots; cilia grey with fuscous sprinkling. Hindwings and cilia grey-whitish. Small and obscure, but not to be mistaken for any other species.

QUEENSLAND: Brisbane; Toowoomba.

12. CELAMA ATMOPHANES n.sp.

ἀτμοφανής, smoky.

♂ ♀, 13–15 mm. Head white or grey. Palpi 1 and a fourth; fuscous. Antennae fuscous; in male with fascicles of branching cilia (1 and a half). Thorax fuscous. Abdomen grey. Legs fuscous with whitish rings; posterior pair except tarsi mostly whitish. Forewings narrow, suboval, costa rather strongly arched, apex rounded, termen slightly rounded, strongly oblique; white more or less densely sprinkled with fuscous; markings dark fuscous; tufts small, dark fuscous, third tuft

median; a large basal costal spot; a spot on one-fourth costa, connected with second tuft, from which a line proceeds to one-third dorsum, indented above margin; postmedian line commencing from a dot on costa before middle, obliquely curved to middle of disc at two-thirds, there acutely angled, and inwardly curved to two-thirds dorsum, not dentate; subterminal suffused, interrupted and ill-defined; a terminal suffusion with some darker dots; cilia grey with some fuscous scales. Hindwings and cilia grey. Obscure, but can hardly be mistaken for any other species.

QUEENSLAND: Injune in October, November, February, March, and April; ten specimens (W. B. Barnard). Type in Queensland Museum.

13. CELAMA LEUCOMA.

Sorocostia leucoma Meyr., Proc. Linn. Soc. N.S.W. 1886, p.725.

Celama leucoma Hmps. ii, p.19, pl.18, f.15.

♂ ♀, 17–18 mm. Head white. Palpi 1 and a half; whitish. Antennae grey, near base white; in male with fascicles of cilia (2). Thorax pale grey; patagia white. Abdomen pale grey. Legs whitish; anterior and middle tarsi fuscous with whitish rings. Forewings moderately broad, triangular, costa gently arched, apex rounded, termen obliquely rounded; pale grey; a white sub-basal costal patch; tufts large, grey, second and third approximated, third tuft beyond middle; markings fuscous; a dot or short mark on costa near base, giving off a short line, anterior to first tuft, to fold or beyond; no antemedian line; a costal dot at one-fourth, another median touching third tuft, and sometimes others smaller between and beyond these; a moderate fascia, including third tuft, from midcosta obliquely outwards, obtusely angled inwards at two-thirds, and inwardly curved to two-thirds dorsum; some white dots or suffusion on apical third of costa; sub-terminal line suffused, with obtuse subcostal and median projections; some terminal dots or suffusion; cilia grey sprinkled with fuscous. Very distinct.

NEW SOUTH WALES: Sydney.

14. CELAMA TETRALOPHA n.sp.

τετραλοφος, with four tufts.

♂, 18–20 mm; ♀, 21–22 mm. Head whitish. Palpi 1 and a half; fuscous. Antennae fuscous or grey; extreme base whitish; in male with fine short pectinations, from which arise tufts of cilia (2). Thorax grey. Abdomen whitish-grey. Legs fuscous with whitish rings; posterior pair except tarsi mostly whitish. Forewings triangular, rather broad, costa gently arched, apex rounded-rectangular, termen slightly rounded, slightly oblique; white with patchy grey suffusion and a variable amount of dark fuscous sprinkling; tufts rather large, fuscous, second and third approximated, a fourth whitish tuft in middle of disc slightly beyond third; extreme base of costa with dark fuscous and grey suffusion; a dark fuscous dot on one-fourth costa connected with second tuft, from which a fine incomplete line proceeds towards two-thirds dorsum; a similar spot on midcosta touching third tuft; median area sometimes densely suffused with dark fuscous and grey; postmedian line dark fuscous, dentate, usually very distinct, from median costal spot, subcostal to three-fourths, thence transverse or slightly oblique, below middle curved inwards to two-thirds dorsum, sometimes indented above margin; sub-terminal more or less suffused, with irregular subcostal and median

posterior prominences; terminal edge usually whitish with dark fuscous dots; cilia grey more or less distinctly barred with whitish. Hindwings and cilia grey.

Variable, but may be distinguished by its short fuscous palpi, rather broad forewings, and whitish fourth tuft, which is however not conspicuous, and may be absent from abrasion.

QUEENSLAND: Maryland near Stanthorpe in February; five specimens (W. B. Barnard). Type in Queensland Museum.

15. *CELAMA PLEUROSEMA* n.sp.

πλευροσημος, with costal mark.

♂, 18 mm. Head and thorax dark grey. Palpi 1 and a half; dark fuscous, upper edge dark grey. Antennae grey; in male with fascicles of cilia (1 and a half). Abdomen grey. Legs fuscous with whitish rings; posterior pair except tarsi mostly whitish. Forewings narrow, triangular, costa moderately arched, apex pointed, termen straight, strongly oblique; grey with dark grey streaks on veins; markings dark fuscous; tufts fuscous, third tuft median; a costal dot at one-fourth, connected with second tuft an elongate median dark costal mark touching third tuft; postmedian reduced to a series of minute dots on veins, from beneath two-thirds costa, moderately outwardly curved, oblique from middle to three-fifths dorsum; cilia grey. Hindwings and cilia pale grey. Recognised by its short fuscous palpi, narrow forewings, sombre colour and elongate costal mark.

QUEENSLAND: Toowoomba in September; one specimen (W. B. Barnard). Type in Queensland Museum.

16. *CELAMA CELAENEPHES* n.sp.

κελαινεφης, darkly clouded.

♂, 16 mm. ♀, 24 mm. Head and thorax dark fuscous. Palpi 1 and a fourth; dark fuscous; ciliations in male one-half. Abdomen pale grey; dorsum of four central segments dark fuscous. Legs dark fuscous with whitish tarsal rings; posterior tibiae grey. Forewings narrow, suboval, costa gently arched, apex pointed, termen slightly rounded, oblique; fuscous with darker markings; tufts small, inconspicuous, third tuft median; costa broadly dark fuscous to one-third; antemedian line from one-third costa, at first transverse, below middle oblique, incurved, ending on one-third dorsum; postmedian line from third tuft, very slender, at first subcostal to two-thirds, thence transverse, below middle incurved to two-thirds dorsum; dorsal half of space between lines darkly suffused; cilia fuscous. Hindwings and cilia grey-whitish. The type of this obscure species is not in good condition, but it is very different from any other. The short palpi and very short antennal ciliations of the male or noteworthy.

QUEENSLAND: Injune in January (W. B. Barnard). VICTORIA: Birchip in February (D. Goudie). I have seen another taken at Sea Lake by the latter.

17. *CELAMA EUCOMPSE* n.sp.

εὐκομπος, neat.

♂, 14 mm. Head white. Palpi 1 and a half; pale fuscous. Antennae grey, basal joint white; in male with fascicles of cilia (2). Thorax and abdomen grey. Legs grey; anterior pair fuscous; tarsi with whitish

rings. Forewings narrowly triangular, costa moderately arched, apex rounded, termen lightly rounded, strongly oblique; white with slight grey irroration; markings fuscous, clearly defined; tufts fuscous, first and third small, second large, third tuft median; second tuft connected by a fine strigule with one-third costa, and by a slender sinuate line with one-third dorsum; a dot on midcosta, sometimes touching third tuft; postmedian line commencing beneath two-thirds costa as a transverse dentate dotted line, bent inwards in middle, oblique and incurved to three-fourths dorsum, below middle preceded by a slight parallel line; subterminal suffused and widely interrupted; a terminal series of dots connected by grey suffusion; cilia grey with obscure whitish bars. Hindwings and cilia white.

More neatly marked than *C. elaphropasta*, to which it is allied. It differs in the shorter palpi, narrow forewings with strongly oblique termen, median third tuft, and white hindwings.

QUEENSLAND: Mt. Tamborine in November; one specimen.

18. CELAMA EURAPHES n.sp.

εὐραφῆς, neatly embroidered.

♀, 18–20 mm. Head and thorax pale grey. Palpi 2; pale grey mixed with white. Antennae whitish-grey. Abdomen pale grey; apices of segments white. Legs white sprinkled with fuscous; tarsi fuscous with white rings. Forewings triangular, costa rather strongly arched, apex subrectangular, termen rounded, slightly oblique; tufts grey, second tuft large, first and third small; an elongate spot on base of costa, touching first tuft; a small grey sub-basal suffusion across mid-disc; a broad curved brownish and fuscous fascia at one-third, its anterior edge sharply defined; several minute blackish costal and subcostal dots beyond this; a similar dot on midcosta, on the anterior edge of an oblong brownish costal spot, giving off a rather suffused broad sinuate line to dorsum beyond middle; subterminal line slender, blackish, commencing on posterior edge of this spot, subcostal for a short distance, then transverse and slightly dentate to below middle, thence angled inwards and again outwards to end on three-fourths dorsum; subterminal brownish, suffused, and roughly parallel; a brownish submarginal line; an interrupted fuscous terminal line; cilia whitish with a slender fuscous median line. Hindwings grey-whitish, cilia whitish.

Roughly similar to *C. fraterna*, but very different in its white forewings with neatly defined markings, and other details.

QUEENSLAND: Brisbane in August, November, and May; three specimens.

19. CELAMA FRATERNA.

Roeselia fraterna Moore, Proc. Zool. Soc. 1888, p.393.

Celama fraterna Hmps. Suppl. i, p.403, pl.23, f.12.

♂ ♀, 14–20 mm. Head grey or whitish. Palpi 2 and a half; fuscous, upper edge grey. Antennae grey; in male with fine short pectinations ending in fascicles of cilia (2). Thorax grey or brownish-fuscous. Abdomen pale grey; apices of segments and tuft sometimes whitish. Legs whitish sprinkled with fuscous; tarsi fuscous with whitish rings. Forewings triangular, costa slightly arched, more strongly towards apex, termen slightly rounded, slightly oblique; whitish suffused with brownish grey; tufts grey, second and third large, third tuft beyond middle; often ♂ brownish-grey basal patch; a brownish-grey

costal patch at one-fourth, connected with second tuft, from which a brownish-grey fascia runs to one-third dorsum; a brownish-grey costal spot touching third tuft; postmedian line slender, dark fuscous, commencing near this spot, subcostal for a short distance, then transverse and slightly dentate, sometimes reduced to dots, below middle inwardly curved to four-fifths dorsum, sometimes with a posterior tooth above margin, preceded by more or less brownish-grey suffusion forming a more or less distinct fascia; subterminal suffused and indistinct; sometimes a submarginal or terminal series of dots; cilia grey with darker bars. Hindwings grey, towards base paler; cilia grey-whitish. Although somewhat variable, this common species has an unmistakable facies.

NORTH AUSTRALIA: Darwin. NORTH QUEENSLAND: Cairns. QUEENSLAND: Yeppoon; Bundaberg; Gayndah; Nambour; Brisbane; Tweed Heads; Toowoomba; Carnarvon Range; Milmeran; Stanthorpe. NEW SOUTH WALES: Sydney. Also from INDIA.

20. CELAMA VAN HASSELTII.

Nola van hasselti Heyl., C. R. Soc Ent. Belg. 1892, p.44.

Nola ceylonica Hmps., Ill. Het. ix, p.88, pl.158, f.13.

Sorocostia desmotes Turn., Trans. Roy. Soc. S.A. 1899, p.15.

Celama ceylonica Hmps. ii, p.24.

♂ ♀, 12–17 mm. Head and thorax ochreous-grey-whitish. Palpi 2 and a half; ochreous-grey, upper edge paler. Antennae grey; in male with fascicles of cilia (1 and a half). Abdomen grey. Legs fuscous or grey with whitish rings. Forewings triangular, costa straight or slightly arched to near apex, apex rounded-rectangular, termen slightly rounded, slightly oblique; whitish more or less suffused with pale brown; markings brown and fuscous; tufts fuscous, third tuft beyond middle; basal half of costa more or less suffused with brown and sprinkled with fuscous; antemedian line slender, fuscous, usually incomplete; postmedian line from beneath two-thirds costa, dentate, sometimes reduced to dots, tolerably straight, but indented above dorsum, where it ends near tornus, sometimes preceded by brown suffusion, but not forming a distinct fascia; subterminal line suffused and indistinct; cilia ochreous-whitish with grey bars. Hindwings white often with a minute median grey dot, cilia whitish.

This abundant species differs from *C. fraterna* in the forewings being brown not grey, without fasciae, tufts fuscous, with a differently formed postmedian line, and white hindwings.

NORTH AUSTRALIA: Darwin. NORTH QUEENSLAND: Cape York; Cairns; Innisfail; Palm I.; Townsville; Lindeman I.; Eungella. QUEENSLAND: Gayndah; Noosa; Nambour; Brisbane; Stradbroke I.; Tweed Heads; McPherson Range; Toowoomba. Also from JAVA, CEYLON, and INDIA. Hampson (ii, p.24) made this species a synonym of *C. squalida* Staud., but I doubt the correctness of this identification.

21. CELAMA PYCNOGRAPHA. *n. s. f.*

πυκνογραφος, thickly marked.

♂ ♀, 14 mm. Head and thorax white with some fuscous suffusion. Palpi in male 2, in female 2 and a half; fuscous, upper edge whitish. Antennae grey, basal joint white; in male with long (2) branching fascicles of cilia. Abdomen pale grey. Legs fuscous with whitish tarsal rings; posterior pair (and in female middle pair) whitish. Forewings

suboval, costa strongly arched, apex rounded, termen rounded, slightly oblique; white with slight local fuscous suffusion; tufts grey with some fuscous scales; markings dark fuscous; a strigula preceding first tuft, sometimes connected with base by dark suffusion; an irregularly thickened transverse line touching second tuft, sometimes double and slightly waved, from one-third costa, at first oblique, soon bent to become transverse, again bent and slightly waved to two-fifths dorsum; an irregularly dentate line from third tuft, at first subcostal to near apex, there bent to become subterminal, thickened, suffused anteriorly; a suffused fuscous or grey terminal line; cilia whitish with fuscous or grey bars. Hindwings and cilia whitish.

NORTH AUSTRALIA: Darwin in October and December; two specimens received from Mr. F. P. Dodd.

22. *CELAMA MACULIFERA* n.sp.

maculiferus, blotched.

♂ ♀, 16–17 mm. Head and thorax white. Palpi 2 and a half; grey, upper edge white. Antennae grey; in male with fascicles of cilia (1 and a half). Abdomen whitish. Legs fuscous with whitish rings; posterior pair whitish. Forewings triangular, costa gently arched, apex sub-rectangular, termen slightly rounded, slightly oblique; whitish; markings and some irroration fuscous; tufts large, fuscous; second tuft connected with costa, and with dorsum by two spots or blotches variable in size; a large irregular pretornal blotch, its posterior dentate edge representing dorsal portion of postmedian line, of which the costal portion is extremely slender, arising from third tuft, at first subcostal, soon transverse and slightly incurved; subterminal line represented by some patchy suffusion; cilia whitish with sub-basal bars and a slender subapical line. Hindwings and cilia grey-whitish. Variable, but very distinct from any other species.

NORTH QUEENSLAND: Kuranda in September and October; Dunk I. in May; three specimens.

23. *CELAMA SPHAEROSPILA* n.sp.

σφαιροσπιλος, with rounded spot.

♀, 17–19 mm. Head and thorax white. Palpi 2 and a half; white, outer surface of second joint except apex pale fuscous. Antennae grey, towards base white. Abdomen grey; apices of segments whitish. Legs whitish; anterior femora, anterior and middle tibiae, and all tarsi fuscous with whitish rings. Forewings triangular, moderately broad, costa rather strongly arched, apex rounded, termen slightly rounded, slightly oblique; whitish-grey; tufts grey with some dark fuscous sprinkling; a rounded dark fuscous and grey median sub-basal spot, preceding and touching second tuft, and connected with one-fourth costa; intervals between this and first tuft, and between second and third tufts, white; a very fine interrupted fuscous line from third tuft, at first subcostal for a short distance, then bent to become transverse to middle of disc, thence sinuate to three-fourths dorsum, edged posteriorly by a fine white line; a slender white subterminal line with rounded subcostal, median, and subdorsal prominences; cilia whitish, sometimes with faint grey bars. Hindwings grey-whitish, a slight grey discal mark on end of cell; cilia whitish.

QUEENSLAND: Gladstone in June; Brisbane in August; two specimens.

24. *CELAMA SUBPALLIDA* n.sp.

subpallidus, somewhat pale.

♀, 20 mm. Head and thorax white. Palpi 3; fuscous. Antennae grey, towards base white. Abdomen pale fuscous; apices of segments whitish. Legs fuscous with whitish rings; posterior tibiae whitish sprinkled with fuscous. Forewings rather broadly triangular, costa moderately arched, apex round-pointed, termen nearly straight, oblique; grey-whitish; markings fuscous; costal edge fuscous near base; a short elongate mark from base of costa; a larger median costal triangle; a small costal spot at three-fourths, emitting a slender, nearly straight, crenulate, interrupted line to two-thirds dorsum; an interrupted, somewhat suffused, subterminal line with a rounded, median, posterior prominence; a narrow terminal suffusion with darker terminal dots; cilia whitish. Hindwings pale grey; cilia whitish.

NORTH AUSTRALIA: Darwin in January; one specimen received from Mr. F. P. Dodd.

25. *CELAMA ARGENTEA*.

Sorocostia argentea Luc., Proc. Linn. Soc. N.S.W. 1890, p.1078.

Celama argentea Hmps. ii, p.12, pl.18, f.9.

♂ ♀, 15–19 mm. Head white. Palpi 3; pale brownish, upper edge white. Antennae grey, towards base white; in male with fascicles of cilia (3). Thorax whitish grey, anteriorly white. Abdomen grey; tuft whitish. Legs whitish; anterior pair fuscous with whitish rings. Forewings moderately broad, triangular, costa gently arched, apex rounded-rectangular, termen slightly rounded, scarcely oblique; whitish-grey; costa broadly white; tufts pale grey-brownish with some dark fuscous scales, second and third large, third tuft beyond middle; some grey-brownish or fuscous dots and striae on costa; traces of an antemedian line connecting a costal dot at one-third to second tuft, and this with dorsum; a costal dot connected with third tuft; postmedian line fuscous, very slender, from costal spot. subcostal to three-fourths, but often partly obsolete, transverse and sinuate in disc, often reduced to a series of dots, with a tooth above dorsum, on which it ends at three-fourths; subterminal grey or fuscous, slender or suffused, interrupted or reduced to dots; a faint grey interrupted terminal line; cilia grey-whitish with faint basal bars. Hindwings and cilia whitish. Easily recognised.

QUEENSLAND: Yeppoon; Brisbane; Tweed Heads.

26. *CELAMA PYGMAEODES* n.sp.

πυγμαιωδης, tiny.

♂, 10–12 mm. Head and thorax white. Palpi 2; fuscous, upper edge white. Antennae pale grey, towards base white; ciliations in male 2 to 2 and a half. Abdomen pale grey. Legs fuscous with whitish rings; posterior pair mostly whitish. Forewings suboval, costa strongly arched, apex rounded, termen obliquely rounded; white with slight pale fuscous suffusion towards termen; markings dark fuscous; basal tuft white, inconspicuous; middle tuft larger, dark fuscous, connected with costa at one-third, and by a strong nearly straight line with dorsum at one-third, sometimes preceded by a very slender parallel line; third tuft scarcely developed; postmedian line strongly sinuate, faintly indicated or obsolete towards costa; subterminal line irregular, interrupted; cilia

whitish with some fuscous scales. Hindwings and cilia pale grey. Characterised by its small size and white suboval forewings with strong almost straight transverse line at one-third.

NORTH AUSTRALIA: Darwin in December. NORTH QUEENSLAND: Kuranda; two specimens received from Mr. F. P. Dodd. I have made the second and larger example, which shows most of the markings better, the type. It has, however, lost its palpi. Only in the first example can the form of the post median line be distinguished.

27. CELAMA AMORPHA n.sp.

ἀμορφος, unformed.

♂ ♀, 16–18 mm. Head grey-whitish. Palpi 2; fuscous, upper edge whitish. Antennae grey, towards base whitish, in male with fascicles of branching cilia (2). Thorax grey. Abdomen grey; in one example with dark fuscous median spots on second and third segments. Legs fuscous; posterior pair mostly whitish; tarsi with whitish rings. Forewings narrow, suboval, costa slightly arched, apex pointed, termen obliquely rounded; grey-whitish with some fuscous sprinkling; tufts fuscous, first and third small, second larger, third tuft beyond middle; usual markings almost wholly obsolete; sometimes a slender oblique line from one-eighth costa to second tuft; sometimes a short oblique strigule from midcosta towards third tuft; sometimes a slender longitudinal line on lower edge of cell; some short longitudinal subterminal and terminal streaks; cilia pale grey with some darker scales. Hindwings and cilia grey-whitish.

WEST AUSTRALIA: Albany in March; four specimens (W. B. Barnard). Type in Queensland Museum.

28. CELAMA PLEUROCHORDA n.sp.

πλευροχορδος, with costal bar.

♂, 18–20 mm. Head and thorax white or grey-whitish. Palpi 3; fuscous, upper edge grey-whitish. Antennae pale-grey; in male with fascicles of cilia (1 and a half). Legs fuscous with whitish rings; posterior pair mostly whitish. Forewings narrow, triangular, costa straight to two-thirds, thence gently arched, apex rounded, termen obliquely rounded; white with dark fuscous markings; tufts rather large, fuscous, third tuft beyond middle; a well defined broad costal streak from base to third tuft, followed by several costal dots; antemedian line absent; postmedian scarcely traceable, from third tuft obliquely outwards, sharply angled above middle, to end of three-fourths dorsum; subterminal interrupted, anteriorly suffused, posteriorly with strong acute dark teeth; cilia fuscous or grey. Hindwings and cilia whitish. Very distinct. A female from the McPherson Range is much smaller (14 mm.), and does not show the submarginal teeth, but must be referred here.

QUEENSLAND: McPherson Range (3,000 ft.) in November; Tweed Heads in August; Toowoomba in October; Maryland near Stanthorpe in December; four specimens (W. B. Barnard). Type in Queensland Museum.

29. CELAMA LECHRIOTROPA n.sp.

λεχριοτροπος, obliquely fashioned.

♀, 15–16 mm. Head white. Palpi 2; grey, upper edge whitish. Antennae whitish. Thorax white or grey. Abdomen pale grey. Legs whitish; anterior pair fuscous with whitish rings. Forewings narrowly

triangular, costa gently arched, apex pointed, termen slightly rounded, strongly oblique; white or grey-whitish with fuscous markings; first tuft small, fuscous, second larger, fuscous, third small, whitish, median; a short oblique mark from base of costa; a costal dot at one-fifth; another at two-fifths connected with second tuft, from which a fine line runs to one-third dorsum, together forming a strongly oblique antemedian line; postmedian strongly oblique, from three-fourths costa to two-thirds dorsum, thickened or suffused, dentate, with an acute tooth just above middle, indented above dorsum; subterminal suffused, interrupted, with subcostal, median, and subdorsal posterior prominences; a series of minute terminal dots; cilia grey-whitish sprinkled with fuscous. Hindwings and cilia grey. Distinguished by its small size and narrow forewings, with two strongly oblique parallel lines.

WEST AUSTRALIA: Denmark in March and April; two specimens (W. B. Barnard). Type in Queensland Museum.

30. *CELAMA PYCNOFASTA* n.sp.

πυκνοπαστος, densely sprinkled.

♂ ♀, 18–20 mm. Head fuscous or grey. Palpi in male 2, in female 2 and a half; fuscous or grey. Antennae grey; in male with fascicles of cilia (2). Thorax fuscous. Abdomen grey. Legs fuscous with whitish rings. Forewings narrowly triangular, costa moderately arched, apex pointed, termen nearly straight, oblique; whitish densely sprinkled with fuscous, appearing grey; tufts mostly fuscous; markings fuscous; a dot on one-fourth costa connected with second tuft, from which a nearly straight line, suffused posteriorly, proceeds to one-fourth dorsum; postmedian commencing with a short strigula from costa on posterior edge of third tuft, subcostal for a short distance, then bent to become transverse and minutely dentate to below middle, thence inwardly curved to end on one-third dorsum; subterminal rather thickly suffused, sometimes interrupted, roughly parallel to postmedian line; a series of pale fuscous terminal dots; cilia whitish with some fuscous scales. Hindwings white with slight grey terminal suffusion; cilia white.

WEST AUSTRALIA: Denmark in March; Perth in September and November; Yanchep in September; seventeen specimens.

31. *CELAMA ELAPHROPASTA* n.sp.

ελαφροπαστος, lightly sprinkled.

♂ ♀, 14–19 mm. Head white. Palpi 2 and a half; pale fuscous. Antennae grey, towards base white; in male with fascicles of cilia (2). Thorax and abdomen pale grey. Legs whitish with some fuscous sprinkling; tarsi fuscous with whitish rings. Forewings narrowly triangular, costa gently arched, apex round-pointed, termen slightly rounded, slightly oblique; white lightly sprinkled with fuscous and grey; tufts grey mixed with fuscous; a spot or strigula on one-fourth or one-third costa, connected with second tuft, from which a fine fuscous line runs to one-third dorsum; third tuft beyond middle connected with costa by some fuscous suffusion; postmedian more or less distinctly double, from costa beyond middle to two-thirds dorsum, transverse to below middle, thence inwardly curved, with a posterior tooth above dorsum; subterminal suffused, wavy, indented above middle; some terminal dots; cilia whitish with some fuscous scales. Hindwings and cilia pale grey.

Near *C. pycnopasta*, but with white head and whitish forewings.

NORTH QUEENSLAND: Cooktown in April; Kuranda in June and November; Mackay in June. QUEENSLAND: Nambour in March; twelve specimens, of which only one is a male.

32. CELAMA CATAPHRACTA n.sp.

καταφρακτος, fenced in.

♂ ♀, 13–16 mm. Head white partly greyish-tinged. Palpi 2 and a half; fuscous, upper edge whitish. Antennae grey, near base white; in male with branching fascicles of cilia (2). Thorax and abdomen whitish-grey. Legs whitish; tarsi fuscous with whitish rings; anterior pair fuscous. Forewings suboval, costa moderately arched, apex rounded, termen obliquely rounded; white mostly suffused with pale grey; markings fuscous; tufts grey mixed with fuscous, second and third approximated, third opposite one-third costa; from second tuft proceeds a short line, strongly curved inwards, towards but not reaching one-third dorsum; a slender interrupted dark fuscous postmedian line from costa beyond middle, subcostal to two-thirds, there bent to become slightly outwardly oblique and slightly dentate, below middle curved inwards and slightly dentate to two-thirds dorsum, preceded by a narrowly suffused line posteriorly white-edged; submarginal broadly suffused and roughly parallel to subterminal; cilia whitish, basal half with square pale fuscous bars. Hindwings and cilia grey-whitish.

Differs from *C. elaphropasta* in its smaller size, rather longer palpi, narrower forewings, with third tuft well before middle, peculiar antemedian line, postmedian arising from before midcosta, and chequered cilia.

QUEENSLAND: Brisbane in March; Toowoomba in September, October, February, April, and May; eight specimens.

33. CELAMA LEUCOLOPHA n.sp.

λευκολοφος, white-tufted.

♂, 17–18 mm. Head and thorax white. Palpi 2; white, near base fuscous. Antennae grey, towards base white; in male with branched fascicles of cilia (2). Abdomen grey; apices of segments and tuft white. Legs fuscous with whitish rings; posterior pair mostly whitish. Forewings triangular, costa gently arched, apex round-pointed, termen slightly rounded, strongly oblique; white; markings dark fuscous; tufts white, third tuft median; a basal costal spot; a spot on one-fourth costa, from which a slender transverse line just anterior to second tuft, bent below middle becoming inwardly oblique and wavy to one-fifth dorsum; a mid-costal dot touching third tuft; postmedian line from third tuft, at first slender and subcostal, soon bent to become transverse and dentate, above middle bent to become inwardly oblique, indented below middle and above dorsum, where it ends at two-thirds, preceded by a broad belt of fuscous suffusion, or this is wholly fuscous, and so fused with the line; subterminal broadly suffused, with small subcostal and larger median rounded projections, sometimes reduced to a slender line; a terminal series of dots; cilia fuscous-grey with white bars. Hindwings and cilia grey-whitish.

Variable in development of markings. Distinguished by palpi being white except at base, forewings and tufts white, the form of the antemedian and postmedian lines, and the bars on cilia.

QUEENSLAND: Crow's Nest near Toowoomba, in October; Bunya Mts. in November; two specimens.

34. CELAMA CHIONOCRANA n.sp.

χιονοκρανος, with snow-white head.

♂, 20 mm. Head white. Palpi 2; fuscous, upper edge white. Antennae grey, towards base white; in male with fascicles of cilia (1 and a half). Thorax grey, patagia white sprinkled with fuscous. Abdomen whitish-grey; tuft whitish. Legs fuscous with whitish rings; (posterior pair absent). Forewings elongate-triangular, costa moderately arched, apex pointed, termen nearly straight, oblique; whitish with dark fuscous markings; tufts fuscous, third tuft beyond middle; a large spot on base of costa; a strongly marked antemedian line from one-third costa, giving off three short sharp posterior processes above middle, below middle more slender and inwardly curved, with a posterior tooth above dorsum, on which it ends at one-fourth; a costal dot opposite third tuft postmedian line from this dot, subcostal to three-fourths, thence transverse and dentate, curved inwards from middle to three-fourths dorsum, near dorsum preceded by a short parallel line; subterminal line well defined, with subcostal and median projections, ending on tornus; a terminal series of dots; cilia pale grey irrorated with fuscous. Hindwings and cilia grey-whitish. Best recognised by the white head, distinct markings, and peculiar antemedian line.

TASMANIA: Bothwell in February; one specimen (W. B. Barnard). Type in Queensland Museum.

35. CELAMA BATHYCYRTA n.sp.

βαθυκυρτος, deeply curved.

♀, 15 mm. Head white. Palpi 2 and a half; ochreous-whitish, lower edge fuscous. Antennae grey, near base white. Thorax pale grey; tegulae white. Legs fuscous with whitish rings; posterior femora and tibiae mostly ochreous-whitish. Forewings triangular, costa strongly arched, apex rounded, termen rounded, slightly oblique; pale grey to postmedian line; terminal area mostly whitish; tufts pale grey, inconspicuous, third tuft beyond middle; a fuscous dot on one-fourth costa; antemedian line fuscous, very slender, from costa opposite second tuft, curved inwards anteriorly to that tuft, then outwardly oblique, angled below middle and inwardly oblique to one-third dorsum, indented above margin; a dark fuscous median costal spot touching third tuft; postmedian from above third tuft, upper half deeply curved outwards, consisting of dark fuscous dots, becoming continuous towards two-thirds dorsum; subterminal faintly indicated by pale grey suffusion; cilia pale grey. Hindwings whitish cilia pale grey.

Characterised by its ochreous-whitish palpi, broad forewings, and deeply curved postmedian line.

NORTH QUEENSLAND: Cape York in November, one specimen (W. B. Barnard). Type in Queensland Museum.

36. *CELAMA EUCOLPA* n.sp.

εὐκόλπος, well curved.

♂, 20 mm. Head white. Palpi 4; fuscous, upper half of second joint white. Antennae grey, towards base white; in male with fascicles of branching cilia. Thorax white, posteriorly tinged with grey. Abdomen grey, towards apex whitish. Legs whitish; anterior pair fuscous with whitish rings. Forewings elongate-triangular, costa rather strongly arched, apex pointed, termen slightly rounded, strongly oblique; white with slight fuscous sprinkling; markings dark fuscous; tufts small, grey with some fuscous scales, third tuft median; a broad mark on base of costa; a costal dot at one-fourth opposite second tuft; a slender line from second tuft towards one-third dorsum, sharply angled inwards; postmedian line commencing on midcosta as a strong subcostal line to three-fourths, from whence it becomes a well-curved series of dots on veins, below middle inwardly oblique, indented above dorsum, on which it ends at two-thirds; no subterminal line, but a series of short streaks on veins in terminal area; some suffused terminal dots; cilia grey with narrow white bars. Hindwings and cilia whitish. Resembles *C. bathycyrtia* in its deeply curved postmedian line, but easily distinguished by its different palpi.

QUEENSLAND: Bunya Mts. in November, one specimen (W. B. Barnard). Type in Queensland Museum.

37. *CELAMA FASCIATA*.

Minnagara fasciata Wlk. xxxv, p.1903.

Nola nigrifascia Hmps., Ill. Het. viii, p.5, pl.139, f.15; Moths Ind. ii, p.141.

Sorocostia platygona Low., Proc. Linn. Soc. N.S.W. 1897, p.11.

♂ ♀, 22–26 mm. Head white. Palpi 2; white with a few fuscous scales. Antennae grey, towards base white; in male with slender pectinations carrying fascicles of cilia (2 and a half). Thorax white, sprinkled, sometimes densely, with fuscous or brown. Abdomen grey-whitish or whitish; dorsal crests on first and second segments brownish; tuft in male whitish-ochreous. Legs whitish with some fuscous scales; anterior tibiae and all tarsi pale fuscous with whitish rings. Forewings triangular, costa gently arched, more strongly towards apex, apex rounded, termen slightly rounded, slightly oblique; white with brownish and fuscous markings; tufts brownish or grey, third tuft beyond middle; basal area more or less suffused with brownish; a series of fuscous costal dots; antemedian line slender, fuscous, from one-fourth costa, outwardly curved anterior to second tuft, ending on one-third dorsum; some grey suffusion between third tuft and costs; a narrow fuscous fascia from midcosta, edged posteriorly with blackish, outwardly curved, inwardly oblique from above middle to two-thirds dorsum, sometimes partly white towards dorsum; subterminal grey-brownish, suffused, irregularly dentate; a grey-brownish submarginal line; cilia white sprinkled with fuscous. Hindwings and cilia whitish. Very distinct. It agrees with the two following species in the postmedian line being free from dentations.

NORTH QUEENSLAND: Cape York; Cairns; Atherton; Townsville; Mackay. QUEENSLAND: Tweed Heads. Also from Sula, Borneo, Ceylon, and India.

38. CELAMA LISSOSTICHA n.sp.

λισοσστιχος, smooth-lined.

♀, 19–20 mm. Head white. Palpi 2 and a half; fuscous, upper edge white. Antennae grey; basal joint white. Thorax grey, sometimes mixed with white anteriorly. Abdomen grey; basal tuft fuscous. Legs grey; anterior pair fuscous; all tarsi with whitish rings. Forewings triangular, costa strongly arched, apex rounded, termen slightly rounded, slightly oblique; white partly suffused with grey; markings fuscous; tufts large, grey, third tuft beyond middle; a short strigula from costa just anterior to first tuft; antemedian line at one-third, more or less completely double, partly interrupted by second tuft, straight or slightly outwardly curved; a spot on costa opposite third tuft; postmedian line slender, commencing beneath costa slightly before third tuft, running obliquely between tuft and costal spot, at two-thirds curved downwards to become transverse, below middle curved inwards to two-thirds dorsum, smooth throughout, preceded by a faint subparallel line indented in middle and above dorsum; subterminal slender, interrupted, irregularly dentate; cilia grey faintly barred with whitish. Hindwings and cilia grey-whitish.

NORTH QUEENSLAND: Kuranda in May. QUEENSLAND: Tweed Heads in January. Three specimens.

39. CELAMA DELOGRAPTA n.sp.

δηλογραπτος, clearly marked.

♀, 20 mm. Head white. Palpi 2; fuscous, upper edge whitish. Antennae grey, near base white. Thorax grey-whitish with a transverse median fuscous bar. Abdomen fuscous; apices of segments whitish. Legs dark fuscous with whitish tarsal rings; posterior pair mostly whitish. Forewings triangular, costa strongly arched, apex rounded, termen rounded, moderately oblique; white partly suffused with grey; costal edge near base blackish; a very fine bisinuate blackish line from costa near base to base of dorsum; tufts grey-whitish, third tuft median, somewhat approximated to second; a thick blackish line, outwardly oblique from one-third costa to fold, there acutely angled to one-third dorsum, and produced slightly towards base; postmedian line blackish, from a dot on midcosta, subcostal to two-thirds, there acutely angled to become transverse, below middle inwardly curved to two-thirds dorsum, not dentate; subterminal line pale fuscous with rounded projections above and below middle, somewhat suffused and interrupted; a terminal series of short blackish streaks; cilia grey, bases obscurely barred with whitish. Hindwings and cilia grey-whitish. Easily recognised by its blackish lines.

QUEENSLAND: Toowoomba in March; one specimen (W. B. Barnard). Type in Queensland Museum.

40. CELAMA ELAPHRA n.sp.

ελαφρος, light.

♀, 12 mm. Head white. Palpi 2 and a half; grey, upper edge white. Thorax and abdomen pale grey. Legs whitish; anterior pair and all tarsi fuscous with whitish rings. Forewings narrow, suboval, costa gently arched, apex rounded, termen rounded, strongly oblique; white; markings fuscous; tufts fuscous, third tuft median; a short streak on costa from base; costal dots at one-fourth and before middle; antemedian line obsolete; postmedian line indicated by some fuscous suffusion; a subapical

spot; smaller submarginal spots below middle and above tornus; cilia whitish. Hindwings and cilia pale grey. May be known by its small size and spotted forewings.

NORTH QUEENSLAND: Kuranda; one specimen received from Mr. F. P. Dodd.

41. *CELAMA GONIOTYPA* n.sp.

γαγιωτυπος, with angled markings.

♂ ♀, 14–16 mm. Head white. Palpi 3; pale fuscous, upper edge grey-whitish. Antennae grey; in male with fascicles of cilia (1 and a half to 2). Thorax and abdomen pale grey. Legs grey; posterior pair whitish; tarsi fuscous with whitish rings. Forewings narrow, almost lanceolate, costa gently arched, apex pointed, termen almost straight, strongly oblique; grey with patchy white suffusion and dark fuscous markings; tufts fuscous, third tuft at or beyond middle, small; more or less white suffusion beneath costa before middle and before apex; antemedian line very slender, from costa opposite first tuft, very oblique to second tuft, there acutely angled inwards to one-fourth dorsum, sometimes with fine acute dentations; postmedian line from beneath three-fourths costa, with two long acute teeth above middle, thence strongly oblique to three-fourths dorsum, indented above margin; a very oblique streak from costa about middle to third tuft, continued by a white line to postmedian; interrupted blackish longitudinal lines in terminal area; in one example an interrupted blackish line on fold; cilia fuscous-grey with pale basal and median lines. Hindwings and cilia whitish-grey. Very distinct and easily recognised when in good condition.

QUEENSLAND: Stanthorpe in December, January, February, and May; seven specimens (W. B. Barnard). Type in Queensland Museum.

42. *CELAMA CYMATIAS* n.sp.

κυματίας, billowy.

♀, 13 mm. Head and thorax pale grey. Palpi 2; grey. Antennae grey. Abdomen dark grey. Legs grey; posterior pair whitish-grey. Forewings triangular, costa slightly arched, apex rounded, termen almost straight, oblique; grey sprinkled with fuscous; markings fuscous, broadly suffused; tufts fuscous, third tuft median; two basal dots; antemedian line from one-fourth costa, broadly suffused to below middle, thence slender and inwardly oblique to one-fifth dorsum; a spot on midcosta touching third tuft; postmedian line from beneath two-thirds costa, sharply defined posteriorly, strongly waved to form three rounded projections, above middle, below middle, and on dorsum, anteriorly broadly but irregularly suffused; subterminal paler, broadly suffused, with strong subcostal, median, and tornal projections; a terminal series of dots; cilia grey sprinkled with fuscous. Hindwings and cilia grey. Recognisable by its small size, sombre colouring, and broadly suffused billowy postmedian line.

NORTH QUEENSLAND: Cape York in October, one specimen (W. B. Barnard). Type in Queensland Museum.

43. *CELAMA PHAEOGRAMMA* n.sp.

φαιογραμμος, darkly inscribed.

♂, 16–18 mm. Head pale grey. Palpi 3 and a half; grey, lower edge fuscous. Antennae grey, paler towards base; in male with fascicles of branching cilia (2). Thorax fuscous, tegulae grey. Abdomen grey.

Legs grey with whitish rings. Forewings narrowly triangular, costa moderately arched, apex pointed, termen slightly rounded, oblique; grey with dark fuscous markings; a short longitudinal streak from base of costa, sometimes widened to reach costal edge; tufts small, dark fuscous, approximated, third tuft before middle; a thick line from base of dorsum to middle, where it joins the subterminal line; second tuft with more or less distinct diverging lines to one-fourth and midcosta; postmedian line from two-thirds costa, more or less dentate, strongly oblique to its junction with the line from base, thence oblique to three-fifths dorsum; fine streaks along veins 2, 3, 4 and 5; subterminal obsolete; cilia grey with slightly darker antemedian bars. Hindwings and cilia pale grey. Distinguished by its long palpi, narrow dark forewings, peculiarly formed postmedian line, and streaks on veins.

QUEENSLAND; Toowoomba in April; Stanthorpe in March; Milmerran in August; three specimens. Type in Queensland Museum.

44. CELAMA EURRHYNCHA n.sp.

εὐρρύγχος, well-beaked.

♂, 20 mm. Head, thorax, and abdomen grey. Palpi 4; grey. Antennae grey; in male with fascicles of cilia (1 and a half). Legs whitish-grey. Forewings narrow, costa strongly arched near base, thence nearly straight to near apex, termen slightly rounded, strongly oblique; whitish sparsely sprinkled with fuscous; markings fuscous; tufts fuscous, second and third somewhat approximated, third median, a fourth tuft in middle at three-fifths; a dot on one-fourth costa, from which proceeds a slender dentate line, anterior to second tuft, at first almost transverse, below middle oblique to one-third dorsum, indented above margin; a costal dot opposite second tuft, and another median, touching third tuft; postmedian line very slender, from above third tuft, subcostal to three-fourths, there indented, above middle sharply angled, inwardly oblique, and slightly dentate to two-thirds dorsum; subterminal well defined posteriorly, slightly suffused anteriorly, with subcostal and median teeth; some terminal dots; cilia whitish sprinkled with fuscous. Hindwings and cilia whitish. Characterised by its long wholly grey palpi, grey head, thorax, and abdomen, and fourth tuft.

VICTORIA: Kiata near Dimboola; one specimen received from Mr. C. Borch.

45. CELAMA BIGUTTALIS.

Tribunta biguttalis Wlk. xxxiv, p.1507.

Sorocostia trigonota Meyr., Proc. Linn. Soc. N.S.W. 1886, p.719.

Celama biguttalis Hmps. ii, p.31, pl.18, f.31.

♂ ♀, 16–25 mm. Head and thorax grey or whitish. Palpi 6 to 7; grey. Antennae grey; in male with fascicles of cilia (1 and a half). Abdomen grey-whitish. Legs whitish; anterior pair fuscous with whitish rings. Forewings narrow, elongate-triangular, costa gently arched, apex obtusely pointed, termen slightly rounded, strongly oblique; whitish, sometimes partly suffused with grey; markings fuscous; first and second tufts fuscous, second large, third small, usually grey, at or before middle, approximated to second, sometimes a small grey fourth tuft near angle of cell; a short broad longitudinal streak from base of costa, joined by an oblique strigule from costa near base; no antemedian line; sometimes a slender streak on fold; a suffused patch on costa before middle, including third tuft; postmedian very

slender, often partly obsolete, from third tuft, subcostal to three-fourths, there twice sharply toothed, strongly oblique from above middle to three-fifths dorsum, slightly dentate or reduced to dots; submarginal suffused or indistinct, sometimes traversed by dark streaks on veins; cilia grey. Hindwings and cilia whitish, very distinct.

QUEENSLAND: Tweed Heads. NEW SOUTH WALES: Murrurundi. VICTORIA: Melbourne; Beaconsfield; Moe; Yallourn. TASMANIA: Launceston; Zeehan; Strahan.

46. CELAMA CERAMOTA n.sp.

κεραμωτος, like earthenware.

♂ ♀, 25-26 mm. Head white or whitish-grey. Palpi 5; fuscous, lower edge towards base grey-whitish. Antennae pale grey; in male with fascicles of branching cilia (2 and a half). Thorax grey; patagia whitish; tegulae brown. Abdomen ochreous-whitish; basal tufts fuscous. Legs fuscous with whitish rings, posterior pair except tarsi ochreous-whitish. Forewings elongate-triangular, costa gently arched, apex pointed, termen nearly straight, oblique; pale brown with patchy whitish suffusion and dark fuscous markings; tufts dark fuscous, first tuft moderate, second large, third very small, nearly approximated to second, median; a subcostal whitish suffusion from base to one-third; no antemedian line; a broad triangular whitish suffusion from middle of disc to apex; postmedian very slender and much interrupted, subcostal from third tuft to two-thirds, there toothed and indented, then curved inwards and slightly sinuate to two-thirds dorsum; a small fuscous suffusion on costa at three-fourths; a whitish bar just before lower two-fifths of termen, sharply defined anteriorly; cilia grey. Hindwings and cilia whitish-grey. Very distinct.

NEW SOUTH WALES: Ebor in February; two specimens.

3. Gen. SOROCOSTIA Rosen.

Ann. Mag. Nat. Hist. (5), xvi, p.435.

Palpi long or very long. Abdomen without crests. Neuration as in *Celama*. Type, *S. albalis* Wlk.

The absence of abdominal crests seems to be a sufficient distinction from *Celama*. The species appear to form a natural group distinguishable by the oblique white markings on the forewings. The only extra-Australian species, which shows some resemblance in this respect, judging by Hampson's figures, is *Celama tineoides* Wlk. from South Africa.

47. SOROCOSTIA PAROMOEAE.

Sorocostia paromoea Meyr., Proc. Linn. Soc. N.S.W. 1896, p.721.

Celama paromoea Hmps. ii, p.30, pl.18. f.20.

♂ ♀, 14-20 mm. Head and thorax white. Palpi in male 4 to 5, in female 6 to 7; white, lower half of external surface fuscous. Antennae grey, towards base white; in male with fascicles of cilia (2). Abdomen and legs whitish. Forewings triangular, costa slightly arched, apex pointed, termen nearly straight, oblique; white; markings grey mixed with fuscous; tufts fuscous, third tuft beyond middle, sometimes grey, approximated to second; antemedian line usually obsolete, from one-fourth costa to one-third dorsum anterior to second tuft,

interrupted; more or less costal suffusion extending to second and third tufts; a straight oblique postmedian fascia from three-fourths costa to two-thirds dorsum, sharply defined posteriorly; a terminal fascia narrowing to apex and tornus; cilia white sprinkled with grey. Hindwings and cilia whitish.

NORTH QUEENSLAND: Cairns. QUEENSLAND: Duarina; Brisbane; Warwick; Stanthorpe; Miles; Cunnamulla. NEW SOUTH WALES: Murrurundi. WEST AUSTRALIA: Denmark.

48. *SOROCOSTIA THOLERA*.

Celama tholera Turn., Proc. Roy. Soc. Tas. 1925, p.113.

♂ ♀, 15-20 mm. Palpi 7 to 8. Male antennae with fascicles of cilia (2). Forewing tufts small, grey, second and third approximated, third tuft beyond middle, a small fourth tuft in disc beneath cell at one-fourth.

QUEENSLAND: Bunya Mts. TASMANIA: Burnie; Wilmot.

49. *SOROCOSTIA HESYCHA*.

Sorocostia hesycha Meyr., Proc. Linn. Soc. N.S.W. 1888, p.922.

Celama hesycha Hmps. ii, p.30, pl.18, f.29.

Unknown to me. Palpi 3.

WEST AUSTRALIA: Geraldton; Carnarvon.

50. *SOROCOSTIA IRENICA*.

Sorocostia irenica Meyr., Proc. Linn. Soc. N.S.W. 1886, p.720.

Celama irenica Hmps. ii, p.29, pl.18, f.28.

Unknown to me. Palpi 4 and a half to 5.

NEW SOUTH WALES: Mt. Kosciusko.

51. *SOROCOSTIA LEUCONEPHESES* n.sp.

λευκονεφης, clouded with white.

♂ ♀, 20-24 mm. Head and thorax white. Palpi 6 to 8; pale fuscous or grey, upper edge whitish. Antennae grey, towards base white; in male with tufts of cilia (1 and a half). Abdomen whitish-grey. Legs grey. Forewings elongate-triangular, costa slightly arched, apex pointed, termen slightly rounded, strongly oblique; grey with some white basal suffusion; tufts dark fuscous anteriorly, white posteriorly, second and third tufts somewhat approximated; a basal suffusion sometimes divided into costal and median streaks extending as far as second tuft; a white line from second tuft to beneath third tuft, thence expanding to one-third costa, sometimes including a grey costal dot; an oblique white line from dorsum beyond middle to apex, almost straight to near costa, there deflected and expanded to apex, often enclosing one or sometimes two grey costal dots, anterior edge of this line sharply defined, posterior edge broadly suffused; only a straight dorsal portion of a white subterminal line sometimes present, but often absorbed in suffusion of previous line; cilia white with a broad grey sub-basal line often divided into bars, and a terminal line, which is sometimes double. Hindwings and cilia pale grey.

Differs from *C. albalis* in the longer palpi, and paler forewings with broadly suffused markings, partial or complete absence of subterminal line, and markings of cilia.

NEW SOUTH WALES: Mt. Kosciusko (6,000 ft.) in January (type). TASMANIA: Cradle Mt. (2,000 ft.) and Derwent Bridge in January and February. Ten specimens. In my revision of the Tasmanian Lepidoptera (1925) I confused this species with *S. paromoëa* Meyr.

52. SOROCOSTIA ALBALIS.

Hypena albalis Wlk. xxxiv, p.1143.

Eromene vetustella Wlk. xxxv, p.1763.

Nola strictalis Zel., Verh. z-b. Ges. Wien, 1872, p.459.

Sorocostia vetustella Meyr., Proc. Linn. Soc. N.S.W. 1886, p.721.

Celama albalis Hmps. ii, p.30.

♂ ♀, 16–20 mm. Head and thorax white. Palpi 3 and a half to 4; grey. Antennae grey; in male with fascicles of cilia (1 and a half). Abdomen pale grey. Legs whitish; anterior pair grey. Forewings elongate-triangular, costa gently arched, apex pointed, termen nearly straight, oblique; white; markings dark ochreous-grey; tufts fuscous, third tuft beyond middle; costa beyond middle suffused with dark ochreous-grey; sometimes a slender oblique line from one-fourth costa to second tuft, from which a slender dentate, often interrupted line runs to one-third dorsum; a broadly suffused fascia from three-fourths costa to mid-dorsum, its posterior edge fuscous and sharply defined, with a tooth on fold; following this a narrow white fascia expanded at apex; submarginal and terminal lines suffused and partly confluent; cilia grey. Hindwings and cilia grey-whitish.

NEW SOUTH WALES: Ebor; Katoomba; Mt. Kosciusko. VICTORIA: Beaconsfield. TASMANIA: Hobart. SOUTH AUSTRALIA: Mt. Lofty.

4. Gen. IDIOCYTTARA NOV.

ἰδιοκυτταρος, with peculiar cell.

Differs from *Nola* in the neuration of the forewings. The cell is short (two-fifths), the discocellulars incurved, and their lower angle produced in a long narrow process; vein 3 arises from near its apex, and 4 and 5 short-stalked or connate from its apex. Type *I. tornotis* Meyr. Hampson records two other species, one from Solomon Is., one from India; in both cases from a solitary male type.

53. IDIOCYTTARA TORNOTIS.

Sorocostia tornotis Meyr., Proc. Linn. Soc. N.S.W. 1887, p.923.

Nola tornotis Hmps. ii, p.40, pl.40, f.9.

♂ ♀, 13–16 mm. Head white. Palpi 2; brownish, upper edge white. Antennae grey, near base white; in male with branching fascicles of cilia (3). Thorax whitish-grey. Abdomen whitish-grey; apices of segments and tuft whitish. Legs fuscous with whitish rings; posterior pair mostly whitish. Forewings elongate-triangular, costa gently arched, apex round-pointed, termen slightly rounded, slightly oblique; in male with a suboblong fovea occupying posterior half of cell; white more or less densely suffused with grey; tufts large, brownish-grey with a few fuscous scales, second and third closely approximated,

third tuft at two-fifths; a brownish-grey dot on one-fifth costa, connected by a strigule with second tuft, thence continued as an irregular slender line to one-fourth dorsum, but sometimes the dot is not developed; usually a brownish-grey costal dot continuous with third tuft; post-median line commencing from this dot, slender blackish, sometimes interrupted or reduced to dots, subcostal to two-thirds, thence nearly transverse and slightly dentate, bent inwards in mid-disc, and curved to two-thirds dorsum, narrowly edged posteriorly with white; sub-terminal broadly suffused, with subcostal and median posterior prominences; a narrow terminal suffusion with a series of darker dots; cilia whitish with grey median bars. Hindwings and cilia whitish.

QUEENSLAND: Duaringa; Brisbane; McPherson Range; Bunya Mts.
NEW SOUTH WALES: Lismore.

5. Gen. NOLA Leach.

Edin. Encycl. ix, p.135; Hmps. ii, p.31.

Palpi porrect, moderate or long. Abdomen with a small dorsal crest on first and often also on second segment. Legs smooth-scaled. Forewings with 2 from two-thirds, 3 from angle, 4 separate, 5 approximated, 6 from beneath upper angle, 7, 8, 10 stalked, 9 absent (coincident with 8), 11 free. Hindwings with 2 from well before angle, 3 and 4 coincident from angle, 5 separate, 12 anastomosing with cell to middle or beyond. Type *N. cucullatella* Linn. A genus of moderate size, but destined to be largely increased; almost confined to Australia and the warmer regions of Asia, Africa and America.

54. NOLA PLAGIOSCHEMA.

Nola plagioschema Turn., Proc. Roy. Soc. Tas. 1938, p.72.

TASMANIA: Waratah; Russell Flats.

55. NOLA NIPHOSTENA.

Sorocostia niphostena Low., Trans. Roy. Soc. S.A. 1896, p.153.

Nola niphostena Hmps. ii, p.42, pl.19, f.19.

Unknown to me.

SOUTH AUSTRALIA: Pt. Victor.

56. NOLA EPICENTRA.

Sorocostia epicentra Meyr., Proc. Linn. Soc. N.S.W. 1886, p.724.

Nola epicentra Hmps. ii, p.43, pl.19, f.11.

Unknown to me.

57. NOLA MELANOGRAMMA.

Nola melanogramma Hmps. ii, p.43, pl.19, f.12.

♀, 20 mm. Head white. Palpi 2; grey, upper edge whitish. Antennae pale grey, near base white. Thorax white sprinkled with fuscous, with a median fuscous spot. Abdomen whitish-grey; crests fuscous. Legs fuscous with whitish tarsal rings; posterior pair mostly whitish. Forewings narrow, triangular, costa slightly arched, apex pointed, termen slightly rounded, strongly oblique; white with sharply defined blackish markings; tufts small, blackish, third tuft median; an oblong spot on base of costa extending to first tuft; antemedian line

from one-third costa, incorporating second tuft, thick to middle of disc, thence attenuated, oblique to one-third dorsum, with a posterior tooth above margin; a dot on midcosta continuous with third tuft; postmedian line arising from third tuft, very slender and subcostal for a short distance, then sharply angled, dentate, thickened and obscurely double, inwardly curved to two-thirds dorsum, indented above margin; subterminal widely interrupted; a terminal series of dots; cilia whitish sprinkled with fuscous.

TASMANIA: Bothwell in February, one specimen (W. B. Barnard). The British Museum type is said to be from New South Wales.

58. NOLA OCHROSTICHA n.sp.

ὤχροστιχος, with pale lines.

♂ ♀, 18–20 mm. Head and thorax fuscous-grey. Palpi 1 and a fourth fuscous. Antennae grey in male with fascicles of cilia (1 and a fourth). Abdomen grey or whitish-grey with a dark fuscous suffusion on middle of dorsum; basal crest fuscous-grey. Forewings elongate-triangular, costa straight to middle, thence arched, apex rounded, termen slightly rounded, oblique; grey with dark fuscous and grey-whitish markings; first tuft small, grey, second and third larger, fuscous, third tuft beyond middle; a spot on one-fourth costa, obliquely connected with second tuft, from which an oblique line, edged anteriorly with whitish, runs to one-fourth dorsum; a costal spot continuous with third tuft, and sometimes connected by a streak with first tuft; postmedian line from third tuft, subcostal to three-fourths, thence dentate and nearly transverse, sometimes reduced to dots, below middle incurved to three-fourths dorsum, edged throughout posteriorly with whitish; subterminal line suffused, with subcostal and median prominences, edged posteriorly with whitish; a whitish submarginal line, interrupted by fuscous dots, and connected by short streaks with termen; cilia fuscous-grey. Hindwings and cilia grey.

An obscure species. The grey-whitish lines are very slender, and although characteristic, are hardly noticeable in worn examples. The short palpi are an aid to recognition.

QUEENSLAND: Toowoomba in August and October; three specimens (W. B. Barnard). Type in Queensland Museum.

59. NOLA SCABRALIS.

Tribunta scabralis Wlk. xxxiv, p.1509.

Nola scabralis Hmps. ii, p.44, pl.19, f.13.

Hampson makes *N. parallacta* Meyr. and *N. ceraunias* Turn. to be synonyms. The first is a very different species. Its long palpi are a sufficient distinction. With regard to the latter I am doubtful. It does not agree very well with Hampson's description, but the differences may be varietal. Hampson's figure is very poor and not helpful.

NEW SOUTH WALES: Sydney.

60. NOLA CERAUNIAS.

Sorocostia ceraunias Turn. (Misprinted *cerraunias*), Trans. Roy. Soc. S.A. 1899, p.15.

NEW SOUTH WALES: Sydney.

61. NOLA BELOTYPA.

Nola belotypa Hmps., Suppl. i, p.421, pl.24, f.15; Turn., Proc. Roy. Soc. Q. 1915, p.14.

NEW SOUTH WALES: Ebor; Katoomba. A mountain species. The type from the Blue Mountains has unfortunately been spoilt by mould, but I have three good specimens from the other locality.

62. NOLA POTHINA n.sp.

ποθεινος, desired.

♂ ♀, 12–22 mm. Head grey, usually mixed with white. Palpi 2; fuscous. Antennae grey; in male with fascicles of cilia (1 and a half). Thorax grey, sometimes with a slender fuscous transverse median bar. Abdomen grey. Legs fuscous with whitish tarsal rings; posterior tibiae grey. Forewings elongate-triangular, costa gently arched, apex rounded, termen slightly rounded, oblique; whitish more or less suffused with grey; markings dark fuscous; tufts large, fuscous or sometimes partly grey, third tuft median; a costal dot near base; a dot on one-third costa, giving rise to a slender transverse line anterior to second tuft, angled below middle, and oblique to one-fourth dorsum; a costal dot touching third tuft; postmedian line from near third tuft, at first slender and subcostal to three-fourths, thence transverse, acutely dentate, broadly suffused anteriorly, from middle of disc inwardly oblique and strongly incurved to two-thirds dorsum, broadly suffused, with submedian and dorsal projections; subterminal roughly parallel, more or less suffused and interrupted; a terminal series of dots; cilia grey, sometimes with slender whitish bars. Hindwings and cilia grey.

Variable in size, and in some details of marking, but recognisable without much difficulty. The broadly suffused and peculiarly shaped postmedian line is characteristic.

QUEENSLAND: Brisbane and Tweed Heads in August; Toowoomba in September and October; Carnarvon Range in December; Stanthorpe in October, November, February, and May. NEW SOUTH WALES: Tenterfield in February; Glen Innes in October; Ebor in December; Murrurundi. VICTORIA: Mt. Buffalo in February.

63. NOLA PLATYZONA n.sp.

πλατυζωνος, broadly girdled.

♀, 21 mm. Head white. Palpi 2; fuscous. Antennae grey. Thorax fuscous. Abdomen grey. Legs fuscous with whitish tarsal rings; posterior tibiae whitish sprinkled with fuscous. Forewings triangular, costa strongly arched, apex rounded, termen slightly rounded, scarcely oblique; whitish densely but unevenly suffused with fuscous; markings dark fuscous; tufts large, grey mixed with fuscous, second and third approximated, third tuft median; a basal costal spot at one-fourth, from which proceeds a strong waved line, anterior to second tuft, to one-third dorsum, its anterior edge finely edged with white in dorsal half; a median costal spot continuous with third tuft, immediately beneath which a broad fascia edged posteriorly with white, and extending anteriorly to antemedian line, runs to dorsum; postmedian line from midcosta, at first slender and subcostal, soon transverse and shortly dentate, below middle bent inwards to join central fascia; subterminal roughly parallel, suffused, with subcostal and submedian posterior projections, towards dorsum edged posteriorly with whitish; a terminal

suffusion; termen edged by a slender white line interrupted by fuscous dots; cilia fuscous with narrow white bars. Hindwings and cilia grey. Allied to *N. pothina*, but very different in wing-shape and markings.

QUEENSLAND: Maryland near Stanthorpe in March (W. B. Barnard), one specimen. Type in Queensland Museum.

64. NOLA VEPALLIDA n.sp.

vepallidus, very pale.

♀, 15–20 mm. Head white. Palpi 4; pale brownish, upper edge white. Antennae ochreous-whitish. Thorax whitish-grey. Abdomen ochreous-whitish. Legs whitish-ochreous. Forewings triangular, costa slightly arched, apex rounded, termen straight, slightly oblique; grey-whitish very lightly sprinkled with fuscous; tufts grey with a few fuscous scales, second and third approximated, third beyond middle; antemedian line obsolete or scarcely perceptible, outwardly curved anterior to second tuft; an oblique grey postmedian line from beneath four-fifths costa to three-fifths dorsum, edged posteriorly by a series of minute fuscous dots on veins; cilia grey-whitish lightly sprinkled with fuscous. Hindwings and cilia whitish. Very distinct.

QUEENSLAND: Brisbane in November; Tweed Heads in August; two specimens.

65. NOLA MONOZONA.

Sorocostia monozona Low., Proc. Linn. Soc. N.S.W. 1897, p.11.

Nola monozona Hmps. ii, p.45, pl.19, f.11.

Unknown to me.

SOUTH AUSTRALIA: Mt. Lofty.

66. NOLA PAROXYNTA.

Sorocostia paroxynta Meyr., Proc. Linn. Soc. N.S.W. 1886, p.719.

Nola paroxynta Hmps. ii, p.47, pl.19, f.23.

Unknown to me.

NEW SOUTH WALES: Sydney. VICTORIA: Melbourne.

67. NOLA ANISOGONA.

Sorocostia anisogona Low., Trans. Roy. Soc. S.A. 1893, p.149.

Nola anisogona Hmps. ii, p.47, pl.19, f.14.

Unknown to me.

SOUTH AUSTRALIA: Mt. Lofty.

68. NOLA LECHRIOPA.

Nola lechriopa Hmps., Suppl. i, p.418, pl.24, f.10; Turn., Proc. Roy. Soc. Q. 1915, p.12.

♂ ♀, 14–16 mm. Head and thorax grey. Palpi 3 and a half to 4; grey. Antennae grey; in male with fascicles of cilia (1). Abdomen grey. Legs fuscous with whitish tarsal rings. Forewings narrowly triangular, costa gently arched, apex pointed, termen nearly straight, oblique; grey with fuscous irroration and markings; tufts mostly grey, third tuft median; second tuft connected with one-third costa, and by a slender line with one-third dorsum; post-median from three-fifths

costa, subcostal to three-fourths, there bent to become inwardly oblique and shortly dentate, below middle curved strongly inwards, ending on two-thirds dorsum; subterminal broadly suffused and irregularly waved; a suffused terminal line; cilia grey. Hindwings and cilia pale grey.

Recognisable by its comparatively long palpi, narrow forewings, and uniform grey colour.

QUEENSLAND: Brisbane; Stradbroke I.; Tweed Heads; Toowoomba.
NEW SOUTH WALES: Brunswick Heads; Sydney.

69. NOLA AENICTIS.

Sorocostia aenictis Meyr., Proc. Linn. Soc. N.S.W. 1888, p.923.

Nola aenictis Hmps. ii, p.45, pl.19, f.15.

Unknown to me.

WEST AUSTRALIA: Geraldton.

70. NOLA PORRIGENS.

Dimona porrigens Wlk. xv, p.1650.

Sorocostia arachneis Meyr., Proc. Linn. Soc. N.S.W. 1886, p.724.

Nola porrigens Hmps. ii, p.46.

NEW SOUTH WALES: Sydney; Jervis Bay. VICTORIA: Beaconsfield.

71. NOLA PARALLACTA.

Sorocostia parallacta Meyr., Proc. Linn. Soc. N.S.W. 1886, p.723.

♂ ♀, 15-22 mm. Head and thorax whitish-grey. Palpi 5 to 6; grey, upper edge whitish-grey. Antennae pale grey; in male with fascicles of cilia (1 and a half). Abdomen pale grey. Legs fuscous with whitish rings; posterior pair grey-whitish. Forewings elongate-triangular, costa gently arched, apex round-pointed, termen slightly rounded, oblique; whitish mostly suffused with pale grey; tufts small, fuscous, third tuft median; antemedian line slender, fuscous, very oblique from one-third costa towards second tuft, transverse and dentate anterior to tuft, curved inwards from middle to one-third dorsum, usually partly or wholly obsolete; an oblique strigule from costa to third tuft; postmedian line slender, fuscous, edged with whitish posteriorly, from one-third costa, but origin usually obsolete, subcostal for a short distance, then transverse, below middle oblique to two-thirds dorsum; subterminal similar but more suffused, obsolete towards costa; some obscure terminal dots; cilia grey. Hindwings and cilia grey-whitish. Pallid and with inconspicuous markings, but not like any other.

NEW SOUTH WALES: Mt. Kosciusko. VICTORIA: Gisborne.
TASMANIA: Weldborough; Cradle Mt.; Waratah; Strahan.

72. NOLA PHLOEOPHILA.

Nola phloeophila Hmps., Suppl. i, p.419, pl.24, f.11; Turn., Proc. Roy. Soc. Q. 1915, p.14.

Nola macrorrhyncha Turn., Proc. Roy. Soc. Tas. 1925, p.113.

♂ ♀, 20-27 mm. Head and thorax grey-whitish. Palpi 4 to 6; fuscous, upper edge whitish. Antennae grey, near base white; in male with branching fascicles of cilia (3). Thorax whitish-grey. Abdomen pale grey. Legs whitish; anterior pair fuscous with whitish tarsal

rings. Forewings rather narrowly elongate-triangular, costa gently arched, apex pointed, termen scarcely rounded, oblique; whitish unevenly sprinkled with fuscous; markings blackish; tufts blackish, second and third approximated, third tuft before middle; costal edge near base dark fuscous; a short oblique bar from base of costa; an oblique streak from costa at one-fourth to second tuft, from which proceeds a fine dentate line, often interrupted or more or less obsolete, to one-fourth dorsum; often a fine streak joining second and third tufts; postmedian line commencing from a midcostal dot, slender, and outwardly oblique to three-fourths, thence continued by a series of dots describing a wide outward curve, below middle incurved to two-thirds dorsum; subterminal roughly parallel, consisting of a series of longitudinal streaks between veins; a terminal suffusion with some marginal dots or short streaks; cilia grey with some whitish bars. Hindwings and cilia whitish.

This wide-spread species varies more than usual in length of palpi, but is fairly constant in markings and easily recognised.

QUEENSLAND: Brisbane; Toowoomba. NEW SOUTH WALES: Ebor; Murrurundi; Mt. Wilson. TASMANIA: Waratah; Weldborough; Mt. Barrow; Hobart; Mt. Wellington. In Brisbane this is a winter species; in Tasmania it occurs in midsummer.

73. NOLA AULACOTA.

Sorocostia aulacota Meyr., Proc. Linn. Soc. N.S.W. 1886, p.722.

Nola aulacota Hmps. ii, p.46, pl.19, f.21.

♂ ♀, 22-24 mm. Head whitish. Palpi 5 to 6; fuscous or grey, upper edge whitish. Antennae pale grey, towards base whitish; in male with fascicles of cilia (2). Thorax grey; patagia and tegulae whitish. Abdomen whitish. Legs whitish; anterior pair fuscous with whitish rings. Forewings narrowly triangular, costa slightly arched, apex pointed, termen nearly straight, strongly oblique; whitish unevenly sprinkled with fuscous; markings dark fuscous; tufts small, elongate, dark fuscous on costal, white on dorsal edge, third tuft median; traces of an antemedian line angled on second tuft; postmedian line from midcosta, slender, subcostal to three-fourths, thence acutely dentate and nearly straight to mid-dorsum, joined anteriorly by several longitudinal lines; subterminal suffused, nearly straight, crossed by several longitudinal lines, which may run to termen; a terminal suffusion with some darker dots; cilia fuscous, sometimes with whitish bars towards base. Hindwings and cilia white.

VICTORIA: Melbourne; Warragul. TASMANIA: Launceston; Deloraine; Strahan; Mt. Wellington.

74. NOLA CYCOTA.

Sorocostia cycota Meyr., Proc. Linn. Soc. N.S.W. 1886, p.723.

Nola cycota Hmps. ii, p.45, pl.19, f.20.

♂ ♀, 18-23 mm. Head white or whitish-grey. Palpi 2 and a half; grey, upper edge white or whitish-grey. Antennae grey; in male with fascicles of cilia (2). Thorax grey; patagia and tegulae whitish-grey. Abdomen grey-whitish. Legs fuscous with whitish rings; posterior pair whitish. Forewings narrowly triangular; costa moderately arched, apex round-pointed, termen nearly straight, oblique; grey usually more or

less sprinkled with whitish; markings fuscous; tufts dark fuscous, first and second large, second and third approximated, third tuft beyond middle; an oblique strigule on base of costa; a dot on one-fourth costa, sometimes connected with second tuft, from which a line runs to one-third dorsum; a dot on midcosta near third tuft; postmedian line slender, dark fuscous, arising from midcostal dot, but origin often obsolete, subcostal to three-fourths, where it is sharply toothed, thence nearly transverse, from above middle oblique to two-thirds dorsum, with a small tooth well above margin; subterminal somewhat suffused, edged posteriorly with whitish, with subcostal and submedian prominences; a terminal series of dots more or less marked; cilia grey. Hindwings and cilia grey-whitish.

NEW SOUTH WALES: Glen Innes; Ebor; Sydney; Katoomba; Jervis Bay. VICTORIA: Mt. Buffalo; Melbourne; Beaconsfield. TASMANIA: Zeehan; Strahan; Queenstown; Derwent Bridge; Coles Bay; St. Marys. SOUTH AUSTRALIA: Mt. Lofty. WEST AUSTRALIA: Albany; Denmark.

75. NOLA ZAPLETHES.

Nola zaplethes Hmps., Suppl. i, p.418, pl.24, f.9; Turn., Proc. Roy. Soc. Q. 1915, p.13.

♂ ♀, 24–28 mm. Head fuscous-brown. Palpi 1 and a half; fuscous-brown. Antennae pale fuscous; in male with fascicles of cilia (1 and a fourth). Thorax grey-whitish; patagia fuscous-brown. Abdomen whitish. Legs whitish sprinkled with grey; tarsi fuscous with whitish rings. Forewings broad, triangular, costa strongly arched, apex rounded-rectangular, termen slightly rounded, scarcely oblique; white partly suffused with pale grey; first tuft whitish, second and third grey, closely approximated, third tuft before middle, a fourth tuft beyond and beneath third, whitish; a broad fuscous-brown streak on costa from base to one-fourth; a fine oblique grey line from costa at one-third to second tuft, from this inwardly oblique and waved to one-fourth dorsum; four blackish dots on middle third of costa, beneath them some grey suffusion; postmedian line grey, slender, arising from the last of these dots, outwardly oblique, broadly curved in mid-dise, indented below middle, thence oblique to two-thirds dorsum, a thick black line from three-fourths costa, outwardly curved, ceasing below middle near termen; a blackish costal dot closely follows this line; some terminal grey suffusion; cilia grey with some white bars. Hindwings and cilia whitish. Very distinct. This amended description is given from specimens in good condition.

QUEENSLAND: Mt. Tamborine and Bunya Mts., in November.

76. NOLA ROBUSTA n.sp.

robustus, strong.

♂ ♀, 21–28 mm. Head white. Palpi 2; pale grey. Antennae grey, basal joint white; in male with fascicles of cilia (1). Thorax grey with a postmedian pair of fuscous dots. Abdomen grey-whitish; dorsal crest grey. Legs fuscous with whitish rings; posterior pair whitish with fuscous tarsal rings. Forewings triangular, costa slightly arched, apex rounded-rectangular, termen slightly rounded, scarcely oblique; whitish unevenly suffused with pale grey; markings dark fuscous; tufts large, grey, second and third approximated, third tuft median; a dark strigule or dot on costa before first tuft; antemedian line slender, oblique, from

one-fourth costa to second tuft, thence inwardly oblique and outwardly angled to one-fourth dorsum; an oblique strigule from costa to second tuft; postmedian line double filled in with grey, from costa just beyond third tuft, obliquely outwards to three-fourths, thence sinuate and inwardly oblique to dorsum beyond middle; subterminal represented by a grey spot on costa, a blackish subapical dot, sometimes double, and a short erect line from tornus; a terminal series of blackish dots; cilia grey. Hindwings and cilia grey-whitish.

Characterised by its robust build, postmedian and subterminal lines, and twin-spotted thorax.

QUEENSLAND: Noosa in October; McPherson Range (3,000 ft.) in March; Tweed Heads in January; Toowoomba in February; fourteen specimens.

77. NOLA EURYLOPHA n.sp.

εὐρυλοφος, with broad tufts.

♀, 26–30 mm. Head whitish-grey. Palpi 2; grey. Antennae grey. Thorax grey; patagia sometimes whitish-grey. Abdomen whitish; dorsal crests, which are larger than usual, grey. Legs whitish sprinkled with fuscous; anterior and middle tarsi fuscous with whitish rings. Forewings elongate-triangular, costa slightly arched, apex rounded-rectangular, termen rounded, scarcely oblique; grey with fuscous and brown markings; tufts large, grey, second and third closely approximated, third tuft beyond middle, a fourth tuft at two-thirds just below middle of disc; a costal dot before second tuft, giving rise to a short slender streak towards middle of base; a series of costal dots; antemedian line from one-fourth costa, slightly oblique and outwardly curved to fold, where it divides into two branches, the first to one-fourth dorsum, the second running along fold for a short distance, and then angled to mid-dorsum; a short streak from midcosta to third tuft; postmedian line very slender, from costa above third tuft, subcostal to two-thirds, thence nearly transverse and irregularly waved to below middle, where it is curved strongly inwards to below fourth tuft, ending on one-fourth dorsum, sometimes connected by a line with posterior branch of antemedian; subterminal line brownish, broadly suffused, with strong posterior prominences above and below middle; a narrow grey submarginal suffusion, connected by dots with termen; cilia whitish sprinkled with fuscous. Hindwings and cilia whitish.

WEST AUSTRALIA: Yanchep, in September; Perth; two specimens.

78. NOLA ZOSTRICA n.sp.

ζωστρικος, girdled.

♂, 22 mm. Head and thorax white. Palpi 2 and a half; white sprinkled with fuscous. Antennae grey, basal joint white; in male with fascicles of cilia (1 and a half). Abdomen brownish-grey; tuft white. Legs whitish sprinkled with fuscous; anterior pair and all tarsi fuscous with whitish rings. Forewings elongate-triangular, costa gently arched, apex rounded, termen rounded, oblique; white; tufts small, whitish-grey, second and third approximated, third tuft before middle; fuscous costal spots near base and at one-third; antemedian line from one-third costa, very slender, fuscous, outwardly curved, incomplete; a narrow grey median fascia, outwardly oblique from costa, angled in mid-disc, thence inwardly oblique, edged posteriorly with blackish dots;

subterminal narrowly suffused, interrupted; a fine interrupted terminal line; cilia white sprinkled with fuscous, with some whitish bars. Hindwings and cilia whitish. Very distinct.

NORTH QUEENSLAND: Lake Barrine, Atherton Tableland, in June; one specimen.

79. NOLA GONIOPHORA n.sp.

γωνιοφορος, marked with angles.

♂ ♀, 28–32 mm. Head and thorax grey. Palpi 3; grey or brownish-grey. Antennae grey; in male with fascicles of cilia (1 and a fourth). Abdomen grey-whitish; crests grey. Legs whitish sprinkled with grey; anterior pair and all tarsi fuscous with whitish rings. Forewings elongate-triangular, costa gently arched, termen slightly rounded, slightly oblique; grey, paler towards costa; markings fuscous; tufts grey, sometimes partly fuscous, second and third approximated, third tuft median; an oblique line from costa near base, acutely angled inwards above first tuft, to fold near base; a costal dot at one-fourth, from which runs a slender antemedian line obtusely angled before second tuft, again angled acutely on fold, thence oblique to near one-fourth dorsum; postmedian line from a dot on midcosta, subcostal to three-fourths, thence inwardly curved to below middle, whence it is strongly oblique to fold, on which it is acutely angled and joined by a line with the antemedian, finally acutely angled outwards before ending on two-thirds dorsum; some short streaks on veins in terminal area; cilia grey. Hindwings and cilia grey-whitish.

WEST AUSTRALIA: Albany and Denmark in March; Margaret R. in November; three specimens.

6. Gen. SELCA.

Wlk. xxxiv, p.1218; Hmps. ii, p.32.

Palpi long. Antennae in male with very long pectinations, near apex simple. Abdomen without dorsal crest. Neuration as in *Nola*. Type *S. latifascialis* Wlk. from Borneo.

An Indomalayan genus of moderate size extending to Africa and South America.

80. SELCA BRUNELLA.

Rhynchopalpus brunellus Hmps., Ill. Het. ix, p.89, pl.156, f.31.

Nola brunella Hmps. ii, p.34.

Nola achromia Hmps., Suppl. i, p.416.

♂ ♀, 14–16 mm. Head white. Palpi 5 to 6; brown-whitish, upper edge white. Antennae white, towards apex grey-whitish; in male with very slender long pectinations (8), apices simple. Thorax white, posteriorly tinged with brown-whitish. Abdomen and legs whitish. Forewings triangular, costa slightly arched, apex rounded, termen rounded, slightly oblique; white irregularly suffused with pale brownish and sometimes sprinkled with a few fuscous scales; tufts small, whitish, sometimes partly fuscous, third tuft median; antemedian line represented by a series of minute blackish dots sharply angled outwards, but usually the upper limb of the angle is not developed, and often the whole line is obsolete; postmedian line of similar dots, from beneath two-thirds

costa to mid-dorsum, with a slight posterior tooth above middle, sometimes this line is obsolete; subterminal suffused, pale brownish, edged posteriorly with white; termen suffused with pale brownish; a terminal series of blackish dots. Hindwings and cilia white.

NORTH QUEENSLAND: Cape York; Cairns; Dunk I. QUEENSLAND: Yeppoon; Brisbane. Also from Ceylon and India.

81. SELCA MAJOR.

Nola major Hmps., Ill. Het. viii, p.48, pl.139, f.13; Suppl. i, p.413.

Nola distributa Hmps. ii, p.36, nec Wlk.

♂, 21 mm. Head and thorax grey-whitish. Palpi 3; fuscous, upper edge grey-whitish. Antennae grey, towards base whitish; antennal pectinations in male very long (8). Abdomen grey. Legs fuscous with whitish rings. Forewings elongate-triangular, costa straight to near apex, apex round-pointed, termen slightly rounded, slightly oblique; grey-whitish; markings dark fuscous; first tuft small, whitish, second and third large, dark fuscous, closely approximated, third tuft median; an oblique strigule from one-third costa to second tuft, from which a fine line runs to one-third dorsum, indented above margin; a suffused costal spot continuous with third tuft; a fine line from third tuft to mid-dorsum; postmedian from beneath two-thirds costa to two-thirds dorsum, sharply dentate; subterminal suffused, interrupted, with subcostal and submedian prominences; a suffused terminal line with some darker terminal dots; cilia whitish sprinkled with fuscous. Hindwings and cilia pale grey.

QUEENSLAND: Duaringa in October (W. B. Barnard). Also from Archipelago, China, India, and Africa. An unusually wide range.

7. Gen. ROESELIA Hb.

Verz., p.397; Hmps. ii, p.51.

Palpi short or moderate, obliquely ascending. Antennae bipectinate, towards apex simple. Abdomen with a small dorsal crest on first segment. Forewings with 2 from four-fifths, 3 from angle, 4 separate, 5 approximated at origin, 6 from below upper angle, 7, 8, 9, 10 stalked, 11 separate. Hindwings with 2 from two-thirds, 3 and 4 stalked, 5 widely separate, 6 and 7 stalked; 12 anastomosing with cell to middle. Type, *R. togatalis* Hb. from Europe. It is doubtful whether Hampson was justified in fixing this species as the type. Meyrick uses *Roeselia* in the place of *Celama* Wlk.

Though poorly represented in Australia, this is a large genus mainly of the tropics in both hemispheres.

82. ROESELIA LUGENS.

Uraba lugens Wlk. xxviii, p.449.

Caesa viduella Wlk. xxxv, p.1729.

Toxoloma australe Feld. Reise Nov. pl.100, f.16.

Selca obscura Swin., Cat. Oxf. Mus. i, p.133.

Nola lugens Meyr., Proc. Linn. Soc. N.S.W. 1886, p. 726.

Roeselia lugens Hmps. ii, p.72.

♂, 23-27 mm.; ♀, 26-34 mm. Palpi 1, slender. Antennae of male with pectinations 5, apical, third simple. Forewings fuscous sprinkled or suffused with whitish; markings dark fuscous; tufts small, grey or fuscous, second and third closely approximated, third tuft before middle; antemedian line from one-third costa to two-fifths dorsum, outwardly curved, more or less waved, sometimes whitish-edged anteriorly; a slender outwardly curved line from before middle of costa to beyond middle of dorsum, sometimes thickened; sometimes a central fuscous suffusion; postmedian from midcosta, sometimes denticulate, outwardly oblique to below middle, there indented, ending on three-fourths dorsum, sometimes edged with whitish posteriorly; subterminal line slender, irregularly dentate. Variable.

NORTH QUEENSLAND: Cooktown; Atherton. QUEENSLAND: Brisbane; McPherson Range; Toowoomba; Stanthorpe. NEW SOUTH WALES: Ebor; Tyringham; Scone; Sydney; Jervis Bay. VICTORIA: Melbourne; Beaconsfield; Gisborne; Dunkeld; Birchip. TASMANIA: Launceston; Waratah; Bothwell; Hobart. SOUTH AUSTRALIA: Adelaide; Mt. Lofty; Penola. WEST AUSTRALIA: Denmark; Perth.

83. ROESELIA LEUCOSPILA.

Uraba leucospila Turn., Trans. Roy. Soc. S.A. 1899, p.16.

Roeselia leucospila Hmps. ii, p.64, pl.20, f.7.

Palpi 1, slender. Unfortunately my two original specimens, including the type, have been destroyed by mould.

NORTH QUEENSLAND: Cairns. QUEENSLAND: Brisbane.

84. ROESELIA METALLOPA.

Nola metallopa Meyr., Proc. Linn. Soc. N.S.W. 1886, p.726.

Roeselia metallopa Hmps. ii, p.59, pl.19, f.30.

QUEENSLAND: Nambour; Brisbane; Stradbroke I.; Tweed Heads; Toowoomba; Stanthorpe. NEW SOUTH WALES: Lismore; Brunswick Heads; Sydney; Jervis Bay. VICTORIA: Melbourne; Moe.

85. ROESELIA MESOLEUCA.

Corula? mesoleuca Low., Trans. Roy. Soc. S.A. 1903, p.39.

Eurynola mesoleuca Hmps., Suppl. i, p.439.

♂, 22-29 mm. Head white or brown-whitish. Palpi 1 and a quarter; second joint thickened with smoothly appressed scales, terminal joint short, obtuse; dark brown. Antennae grey, in male with long pectinations (5 to 6), apical two-fifths simple. Thorax grey with a posterior white spot; patagia brown, apices dark fuscous. Abdomen whitish more or less suffused with grey. Legs grey-whitish with a few fuscous scales; tarsi fuscous with whitish rings. Forewings triangular, costa straight to middle, thence arched, apex rounded, termen slightly rounded, slightly oblique; grey with fuscous markings and a suffused white fascia; a short bar from costa ending in a tuft at one-sixth; two parallel lines from costa at one-third and shortly beyond, included space filled in with grey, to dorsum before middle; postmedian line very slender, finely dentate, and outwardly oblique to middle of disc, there bent longitudinally inwards, again bent at a right angle and vertical to

two-thirds dorsum, a white fascia edged by this line to middle of disc, then expanding beyond it to tornus; subterminal line slender, interrupted, or reduced to dots; cilia pale grey. Hindwings and cilia whitish.

Hampson made the genus *Eurynola* for this species, distinguishing it from *Roesebia* by the separate origin of vein 7 of the forewings; but I find that in five examples this vein is connate with 7, 8, 9 in three, stalked in two.

NORTH QUEENSLAND: Cape York in October and May; Kuranda in October; five specimens. Also from Cooktown.

8. Gen. AEDEMON nov.

αἰδημων, modest.

Face not prominent. Palpi rather short, obliquely ascending; second joint moderately thickened with rough scales; terminal joint very small. Antennae in male bipectinate. Thorax with rough posterior crest. Abdomen without crests. Legs smooth. Forewings with 2 from shortly before angle, 3 from angle, 4 and 5 very closely approximated for some distance, 6 from well below angle, 7, 8, 9 stalked, 7 separating before 9, 10 and 11, separate. Hindwings with cell three-fifths, broad; 2 from three-fourths, 3 and 4 connate, 5 well separate, 6 and 7 stalked, 12 anastomosing with cell to beyond middle.

86. AEDEMON EURAPTA n.sp.

εὐραπτος, neat.

♂, 30 mm. Head and thorax grey. Palpi 1 and a fourth; grey, upper edge fuscous. Antennae grey; pectinations in male 3, extreme apex simple. Abdomen grey-whitish. Legs grey; posterior pair whitish. Forewings elongate-triangular, costa strongly arched; grey with dark fuscous markings; tufts small, second and third approximated, third tuft before middle; antemedian line from one-fourth costa to two-fifths dorsum, strongly outwardly curved, indented above margin; a roughly parallel wavy line from one-third costa to mid-dorsum; several short streaks on bases of veins arising from cell; postmedian line from three-fourths costa to three-fourths dorsum, slender, sharply defined, with an acute tooth beneath costa followed by smaller dentations, partly edged with whitish posteriorly; a faint pale crenulate subterminal line; cilia grey. Hindwings grey-whitish with a narrow fuscous terminal band; cilia whitish.

QUEENSLAND: Stanthorpe in January (W. B. Barnard); one specimen. Type in Queensland Museum.

9. Gen. SPATHOPTILA nov.

σπαθοπτιλος, with spatulate wings.

Face with a smooth rounded projection. Palpi rather short, slender, only slightly rough-scaled, obliquely ascending; second joint scarcely thickened; terminal joint short, slender, pointed. Thorax with a smoothly rounded posterior crest. Abdomen without dorsal crests. Legs smooth. Forewings with 2 from three-fourths, 3 from angle, 4 separate, 5 approximated, 6 from below upper angle, 7, 8, 9 stalked, 7 separating before 9, 10 and 11 separate. Hindwings with cell three-fifths; 2 from three-fourths, 3 and 4 stalked, 5 approximated, 6 and 7

connate, 12 anastomosing with cell to beyond middle. Doubtless allied to *Zia*, with which it agrees in neuration, but there are many points of difference.

87. SPATHOPTILA CYCLOPHORA n.sp.

κυκλοφορος, marked with circles.

♀, 34 mm. Head white. Palpi 1 and a fourth; white. Antennae fuscous, near base white. Thorax whitish-grey sprinkled with fuscous. Abdomen grey-whitish. Legs whitish; anterior tarsi fuscous with whitish rings. Forewings narrow at base, but dilated towards apex, costa strongly arched, apex rectangular, termen slightly rounded, slightly oblique; grey with fuscous markings; tufts fuscous, third tuft median, a fourth tuft near lower angle of cell; a white suffusion on costa near base; antemedian line slender, imperfect; postmedian line slender, distinct, subcostal to two-thirds, where it forms an acute tooth, thence incurved to a strong obtuse median projection, from which it curves inwards to three-fifths dorsum; a circular ring around fourth tuft, followed by two circles forming an oblique figure of 8 in middle of disc; subterminal suffused, sharply and irregularly dentate; cilia grey. Hindwings white, towards apex suffused with grey, cilia white, on apex grey. The type is not in good condition.

WEST AUSTRALIA: Nornalup in November; one specimen.

10. Gen. ZIA Wlk.

xxvii, p.109; Meyr., Proc. Linn. Soc. N.S.W. 1886, p.716; Hmps. ii, p.75.

Face with anterior tuft of scales. Palpi long, obliquely ascending; second joint thickened with rough hairs; terminal joint long (one-half), thickened with rough hairs, obtuse. Antennae in male ciliated. Thorax with strong posterior crest. Abdomen with dorsal crests on first two segments. Forewings with 2 from two-thirds, 3 from angle, 4 and 5 separate, 6 from below upper angle, 7, 8, 9 stalked, 7 separating before 9, 10 and 11 separate. Hindwings with 2 from three-fourths, 3 and 4 stalked, 5 somewhat approximated, 6 and 7 connate, 12 anastomosing with cell to beyond middle. Type, *Z. tactalis* Wlk.

A small tuft of scales is present on the inferior surface of the basal joint of the antennae, as in other genera of this family. Hampson records two species from India and one from Ceylon, but I do not think these should be included in this genus.

88. ZIA TACTALIS.

Zia tactalis, Wlk., xxvii, p.110; Meyr., Proc. Linn. Soc. N.S.W. 1886, p.716; Hmps. ii, p.75.

Palpi 6. Forewings with a small basal tuft, a large tuft in the posterior part of the cell, and another similar beneath the cell, the two latter forming an outwardly oblique interrupted ridge.

QUEENSLAND: Rockhampton; Brisbane. NEW SOUTH WALES: Lismore; Sydney; Jervis Bay. VICTORIA: Sea Lake. WEST AUSTRALIA: Bridgetown.

89. ZIA PLAGIOCHYTA n.sp.

πλαγιοχυτος, obliquely suffused.

♂ ♀, 30-34 mm. Head white. Palpi 2 and a half; brown, upper edge whitish. Antennae grey, basal joint white; in male with fascicles

of cilia (2 and a half). Thorax pale grey; patagia and tegulae white. Abdomen grey-whitish. Legs ochreous-whitish; anterior pair fuscous with whitish rings. Forewings elongate-triangular, costa gently arched, apex rounded, termen slightly rounded, oblique; whitish with dark fuscous markings and irroration; a small white basal tuft; two tufts, one in and one beneath cell, forming a continuous dark fuscous slightly oblique ridge just before middle; a strong streak from base beneath costa to two-fifths; antemedian line from one-fourth costa to one-third dorsum, strongly angled before second tuft; a costal spot at two-thirds connected with subcostal streak and second tuft, continued obliquely beyond this to form a central suffusion; postmedian line slender, from three-fifths costa, oblique and denticulate to middle of disc, there angled inwards to two-thirds dorsum; subterminal line dentate, suffused and interrupted, from four-fifths costa, incurved in middle; some short streaks on veins running into termen; cilia fuscous. Hindwings and cilia grey-whitish.

QUEENSLAND: Stanthorpe in March and May. NEW SOUTH WALES: Ebor in March. Type in Queensland Museum.

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